

LOCUS MAP
Not to Scale

SITE DEVELOPMENT PLANS

PROPOSED RESIDENTIAL DEVELOPMENT

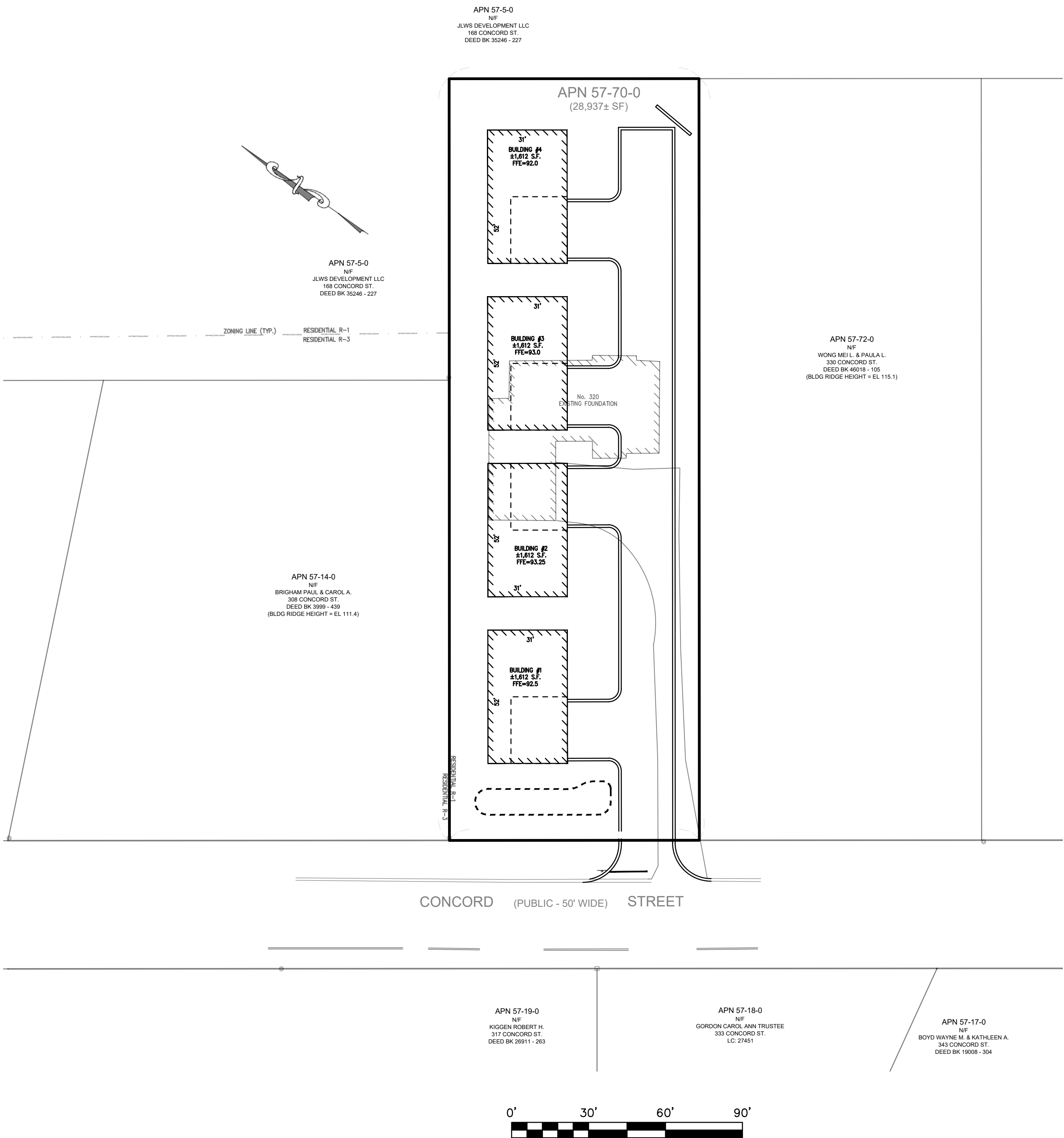
320 CONCORD STREET

IN

ROCKLAND, MASSACHUSETTS

Drawing Index:

No.	Drawing Title
CS-1	COVER SHEET
L-1	LEGEND, ABBREVIATIONS & GENERAL NOTES
EX-1	EXISTING CONDITIONS PLAN
C-1	SITE LAYOUT PLAN
C-2	GRADING AND DRAINAGE PLAN
C-3	UTILITY PLAN
ESC-1	EROSION AND SEDIMENT CONTROL PLAN
T-1	FIRE TRUCK TURNING PLAN
D-1 - D-6	CONSTRUCTION DETAILS



Owner/Applicant:

WALL STREET DEVELOPMENT CORP.
2 WARTHIN CIRCLE
NORWOOD, MA 02062

Engineer/Surveyor:

MCKENZIE ENGINEERING GROUP, INC.
150 LONGWATER DRIVE
SUITE 101
NORWELL, MASSACHUSETTS 02061

ISSUE DATE: OCTOBER 7, 2021
REVISED: NOVEMBER 30, 2021

REV	DATE	DESCRIPTION	BY	APP
1	11/30/21	DRAINAGE & UTILITIES	ESS	BCM

MCKENZIE
ENGINEERING GROUP
Assinippi Office Park
150 Longwater Drive, Suite 101
Norwell, MA 02061
P: 781.792.3900
F: 781.792.0333
www.mckeng.com

SITE DEVELOPMENT PLANS
(ASSESSOR'S MAP 57, PARCEL 70)
320 CONCORD STREET
ROCKLAND, MASSACHUSETTS

PROFESSIONAL ENGINEER:

BRADLEY C. MCKENZIE
No. 30917
REGISTERED PROFESSIONAL ENGINEER
COMMONWEALTH OF MASSACHUSETTS

OWNERS/APPLICANT:
WALL STREET DEVELOPMENT
CORP.
2 WARTHIN CIRCLE
NORWOOD, MASSACHUSETTS 02062

PERMIT PLAN SET

DRAWN BY:	ESS
DESIGNED BY:	ESS
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	OCTOBER 7, 2021
SCALE:	1" = 30'
PROJECT NO.:	221-187
DWG. TITLE:	COVER SHEET

DWG. NO.:	CS-1
-----------	------

ABN	ABANDONED
ACP	ASBESTOS CEMENT PIPE
ACR	ACCESSIBLE CURB RAMP
ADJ	ADJUST
APPROX	APPROXIMATE
ASPH	ASPHALT
ACOMP	ASPHALT COATED CORRUGATED METAL PIPE
B	BOLLARD
BD	BOUND
BLDG	BUILDING
BIT CONC	BITUMINOUS CONCRETE
BM	BENCHMARK
BS	BOTTOM OF SLOPE
CAP	CORRUGATED ALUMINUM PIPE
CB	CATCH BASIN
C&C	CUT AND CAPPED
CB/DH	CONC. BOUND/DRILL HOLE
CB/EPLP	CB/ESCUICHEON
CCB	CAPE COD BERM
CIP	CAST IRON PIPE
CIT	CHANGE IN TYPE
E	CENTERLINE
CL	CHAIN LINK FENCE
CO	CLEAN OUT
CONC	CONCRETE
COND	CONDUIT
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED POLYETHYLENE PIPE
CS	COMBINED SEWER
CSMH	COMBINED SEWER MANHOLE
CULV	CULVERT
Δ	DELTA ANGLE
D	DRAIN
DCB	DOUBLE CATCH BASIN
DIP	DUCTILE IRON PIPE
DMH	DRAIN MANHOLE
E	ELECTRIC
ECC	EXTRUDED CONCRETE CURB
ELEV	ELEVATION
EMH	ELECTRIC MANHOLE
E/T/C	ELECTRIC, TELEPHONE, & CABLE TV
EW	END WALL
EXIST	EXISTING
FAB	FIRE ALARM BOX
FES	FLARED END SECTION
FND.	FOUND
FND	FOUNDATION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
G	GAS
GD	GROUND
GG	GAS GATE
GIP	GALVANIZED IRON PIPE
GP	GUARD POST
GS	GAS SERVICE
GR	GRASS RAIL
GRNLT	GRANITE
HDPE	HIGH-DENSITY POLYETHYLENE PIPE
HH	HANDHOLE
HOR	HORIZONTAL
HP	HIGH PRESSURE
HWL	HEADWALL
HYD	HYDRANT
INV	INVERT
I.P.	IRON PIN
I.R.	IRON ROD
L	LEAD
LSA	LANDSCAPED AREA
LP	LIGHT POLE
MAX	MAXIMUM
MC	METAL COVER
MCC	MONOLITHIC CONCRETE CURB
MH	MANHOLE
MHB	MASS. HIGHWAY BOUND
MIN	MINIMUM
MLP	METAL LIGHT POLE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OHW	OVERHEAD WIRE
PB	PULL BOX
PE	POLYETHYLENE PIPE
PL	PROPERTY LINE
PROP	PROPOSED
PVC	POLYVINYL CHLORIDE PIPE
PVMT	PAVEMENT
PWW	PAVED WATER WAY
RCP	REINFORCED CONCRETE PIPE
REM	REMOVE
REMOD	REMODEL
RET	RETAIN
ROW	RIGHT OF WAY
RR	RAILROAD
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
S	SEWER
SB	STONE BOUND
SDH	STONE BOUND/DRILL HOLE
SGE	SLOPED GRANITE EDGING
SMH	SEWER MANHOLE
STA	STATION
SS	SEWER SERVICE
STL	STEEL
SW	SIDEWALK
T	TELEPHONE
TCB	TRAFFIC CONTROL BOX
TL	TRAFFIC LIGHT
TMH	TELEPHONE MANHOLE
Tr	TREE
TRANS	TRANSFORMER
TS	TOP OF SLOPE
TSV	TAPPING SLEEVE, VALVE AND BOX
TYP	TYPICAL
UP	UTILITY POLE
VCF	VERTIFIED CLAY PIPE
VERT	VERTICAL
VGC	VERTICAL GRANITE CURB
W	WATER MAIN
WG	WATER GATE

1. LOCUS IS SHOWN AS PARCEL NUMBER 57-70 ON THE TOWN OF ROCKLAND ASSESSORS MAPS.
2. DEED TO LOCUS IS RECORDED IN THE PLYMOUTH COUNTY REGISTRY OF DEEDS AT BOOK 54287, PAGE 47.
3. THIS SURVEY WAS MADE ON THE GROUND IN SEPTEMBER OF 2021 BY MCKENZIE ENGINEERING GROUP, INC.
4. ELEVATIONS SHOWN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988
5. WETLAND RESOURCE AREAS WERE NOT ENCOUNTERED DURING THE FIELD SURVEY.
6. LOCUS IS ZONED R1
7. MINIMUM SETBACK REQUIREMENTS:
 - FRONT YARD 25'
 - SIDE YARD 15'
 - REAR YARD 50'
8. LOCUS IS SITUATED IN ZONE X AS SHOWN ON F.I.R.M. NO 25023C00182K, EFFECTIVE JULY 6, 2021.
9. LOCUS IS NOT LOCATED IN A DEP ZONE 2 OR TOWN OF ROCKLAND AQUIFER PROTECTION DISTRICT.
10. UTILITY INFORMATION FROM ABOVE GROUND OBSERVED EVIDENCE IN CONJUNCTION WITH DIG SAFE MARKINGS AND RECORD PLANS. THE LAND SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE LAND SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. BEFORE CONSTRUCTION CALL DIG SAFE SYSTEMS, INC. AT 1-888-344-7233.
11. PLAN REFERENCES:

PB	PG
44	80

1. ALL EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY EARTH MOVING ACTIVITIES.
2. THE CONTRACTOR SHALL KEEP ON SITE AT ALL TIMES, ADDITIONAL SILTATION FENCING AND FILTER FABRIC FOR INSULATION DIRECTED BY THE TOWN AT TIMES OF LOCAL EMERGENCY ADDITION.
3. UPON COMPLETION OF ALL SITE WORK THE CONTRACTOR SHALL INSPECT ALL ON-SITE AND OFF-SITE CATCH BASINS (THAT RECEIVED CATCH BASIN PROTECTION) AND DRAINAGE MANHOLES AND REMOVE ALL SEDIMENT AND DEBRIS THAT HAS ACCUMULATED DURING THE COURSE OF CONSTRUCTION.
4. UNSUITABLE SOILS LOCATED WITHIN THE LIMITS OF THE SUBSURFACE INFILTRATION SYSTEMS SHALL BE REMOVED PRIOR TO INSTALLATION OF THE SYSTEM. THE BOTTOM OF EXCAVATION SHALL BE INSPECTED BY THE PROJECT ENGINEER PRIOR TO THE LACEMEN OF THE SUBSURFACE CHAMBERS.
5. SUBSURFACE INFILTRATION SUBSOIL SHALL BE OVEREXCAVATED UNTIL THE NATIVE SAND MATERIALS ARE ENCOUNTERED (SUBSURFACE SYSTEM, C1 SAND) LAYER AT APPROX. EL. 86.2). THE SUBSURFACE INFILTRATION SYSTEM SHALL BE PLACED OVER IMPORTED SAND CONFORMING WITH THE REQUIREMENTS OF THE MASSACHUSETTS SANITARY CODE (TITLE V) AS NEEDED.

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO RELOCATE EXISTING FIELD LOCATION UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCHMARKS NECESSARY FOR THE WORK.
3. THE CONTRACTOR SHALL COORDINATE ALL STREET WORK WITH THE ROCKLAND DPW.
4. THE CONTRACTOR SHALL EXCAVATE THE TEST PITS PRIOR TO INSTALLING THE DOMESTIC WATER SERVICE TO VERIFY THE ELEVATIONS AND LOCATIONS OF EXISTING UTILITIES. THE CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH THE RESULTS PRIOR TO COMMENCING ANY WORK.
5. ALL WATER SERVICE SHALL BE INSTALLED WITH 5' OF COVER EXCEPT AS NOTED OR DETAILED OTHERWISE.
6. ALL WATER SERVICE APPURTENANCES, MATERIALS, METHODS OF INSTALLATION SHALL MEET OR EXCEED ALL LOCAL MUNICIPAL REQUIREMENTS.
7. THE DOMESTIC WATER SERVICE SHALL BE ADEQUATELY PROTECTED AGAINST BACKFLOW (BACKFLOW PREVENTION) AT THE BUILDING.
8. AFTER PRESSURE TESTING AND CHLORINATION IS COMPLETED, SAMPLES SHALL BE TAKEN FROM THE DOMESTIC WATER SERVICE AND SHALL BE TESTED AT 200 PSI FOR A MINIMUM OF 2 HOURS. THE CONTRACTOR IS REQUIRED TO NOTIFY THE ABINGTON ROCKLAND JOINT WATER WORKS AT LEAST 24 HOURS PRIOR TO THE TESTING.
9. THE DOMESTIC WATER SERVICE SHALL BE TESTED IN ACCORDANCE WITH DEPARTMENT OF ENVIRONMENTAL PROTECTION REGULATIONS. A MINIMUM OF 2 SEPARATE WATER SAMPLES SHALL BE TESTED AT A STATE CERTIFIED LABORATORY.
10. A MINIMUM OF 10 FEET CLEAR HORIZONTALLY SHALL BE MAINTAINED BETWEEN SANITARY SEWER SERVICES AND WATER SERVICE. WHENEVER CONDITIONS PRESENT A LATERAL SEPARATION OF 10 FEET TO A WATER SERVICE THE ELEVATION OF THE CROWN OF THE SEWER SHALL BE AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER SERVICE. ALL OTHER UTILITIES REQUIRE MINIMUM 5' SEPARATION FROM OTHER UTILITIES.
11. ALL GRAVITY SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) SDR-35 UNLESS OTHERWISE NOTED.
12. WHERE SANITARY SEWERS CROSS WATER MAINS, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER MAIN. IF THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THIS REQUIREMENT, THE WATER MAIN SHALL BE RELOCATED TO PROVIDE THIS SEPARATION OR CONSTRUCTED WITH MECHANICAL-JOINT PIPE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE SEWER. ONE FULL LENGTH OF WATER MAIN SHALL BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. WHENEVER IT IS IMPOSSIBLE TO OBTAIN VERTICAL SEPARATION AS STIPULATED ABOVE, BOTH THE WATER MAIN AND THE SEWER MAIN SHALL BE ENCASED IN CONCRETE FOR A MINIMUM DISTANCE OF 10 FEET FROM THE CROSSING POINT OF THE OTHER PIPE AS MEASURED NORMALLY FROM ALL POINTS ALONG THE PIPE.
13. THE LOCATIONS OF PROPOSED ELECTRIC, TELEPHONE AND COMMUNICATION (E.T.C.) SERVICES ARE APPROXIMATE. THE ELECTRICAL ENGINEER SHALL VERIFY THESE LOCATIONS PRIOR TO THE START OF CONSTRUCTION. COORDINATE ALL E.T.C. WORK WITH THE APPROPRIATE UTILITY COMPANIES.
14. THE PROPOSED GAS SERVICE LOCATION IS APPROXIMATE ONLY. THE CONTRACTOR SHALL COORDINATE THE GAS SERVICE INSTALLATION WITH THE MUNICIPAL GAS COMPANY.
15. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH ROCKLAND DEPARTMENT OF PUBLIC WORKS AND ABINGTON ROCKLAND JOINT WATER WORKS SPECIFICATIONS.
16. ALL EXISTING UTILITIES WITHIN THE SITE ARE TO BE REMOVED UNLESS OTHERWISE STATED TO REMAIN.



SITE DEVELOPMENT PLANS

(ASSESSOR'S MAP 57, PARCEL 70)

325 CONCORD STREET
ROCKLAND, MASSACHUSETTS

PROFESSIONAL ENGINEER:



WALL STREET DEVELOPMENT
CORP.
2 WARTHIN CIRCLE
NORWOOD, MASSACHUSETTS 02062

PERMIT PLAN SET

DRAWN BY:	ESS
DESIGNED BY:	ESS
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	OCTOBER 7, 2021

PROJECT NO.:	221-187
DWG. TITLE:	

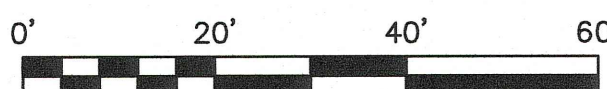
LEGEND, ABBREVIATIONS & GENERAL NOTES

DWG. NO:

L-1



Not to Scale



SURVEY NOTES:

1. LOCUS IS SHOWN AS PARCEL NUMBER 57-70 ON THE TOWN OF ROCKLAND ASSESSORS MAPS.
2. DEED TO LOCUS IS RECORDED IN THE PLYMOUTH COUNTY REGISTRY OF DEEDS
3. AT BOOK 54287, PAGE 47.
4. THIS SURVEY WAS MADE ON THE GROUND IN SEPTEMBER OF 2021 BY MCKENZIE ENGINEERING GROUP, INC.
5. ELEVATIONS SHOWN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.
6. WETLAND RESOURCE AREAS WERE NOT ENCOUNTERED DURING THE FIELD SURVEY.
7. LOCUS IS ZONED R1
8. MINIMUM SETBACK REQUIREMENTS:
 - FRONT YARD 25'
 - SIDE YARD 15'
 - REAR YARD 50'
9. LOCUS IS SITUATED IN ZONE X AS SHOWN ON F.I.R.M. NO 25023C0182K, EFFECTIVE JULY 6, 2021.
10. LOCUS IS NOT LOCATED IN A DEP ZONE 2 OR TOWN OF ROCKLAND AQUIFER PROTECTION DISTRICT.
11. UTILITY INFORMATION FROM ABOVE GROUND OBSERVED EVIDENCE IN CONJUNCTION WITH DIG SAFE MARKINGS AND RECORD PLANS, THE LAND SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE LAND SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. BEFORE CONSTRUCTION CALL DIG SAFE SYSTEMS, INC. AT 1-888-344-7233.
12. PLAN REFERENCES:
 - PB 44
 - PG 80
13. BUFFER ZONE TO OFF-SITE WETLAND RESOURCE AREAS SHOWN ON PLAN IS BASED ON MASSGIS DATA AND APPROXIMATE ONLY.





















ABBREVIATIONS	
FFE	FIRST FLOOR ELEVATION
BIT CONC.	BITUMINOUS CONCRETE PAVEMENT
CCB	CAPE COD BERM
VEP	EDGE OF PAVEMENT
BC	BITUMINOUS CONCRETE CURB
(AM)	AS MEASURED
RET WALL	RETAINING WALL
CONC.	CONCRETE
RCP	REINFORCED CONCRETE PIPE
VCC	VERTICAL GRANITE CURB
ETW	EDGE OF TRAVEL WAY
MTL	METAL BERM
VCC	VERTICAL CONCRETE CURB
CMP	CORRUGATED METAL PIPE
LSA	LANDSCAPED AREA

LEGEND













SURVEY SYMBOLS

- | | | |
|-------|--------------------------|--------------------------------|
| | • | REBAR |
| | ✓ | ANGLE IRON |
| CB/DH | <input type="checkbox"/> | CONCRETE BOUND WITH DRILL HOLE |
| SB | <input type="checkbox"/> | STONE BOUND |
| SB/DH | <input type="checkbox"/> | STONE BOUND |

UTILITY SYMBOLS

- | | |
|---|-----------------------|
|  | CHIMNEY |
|  | ELECTRIC HAND HOLE |
|  | GUY POLE |
| —GW | GUY WIRE |
|  | HVAC UNIT |
|  | BUILDING LIGHT W/MAST |
|  | BUILDING LIGHT |
|  | TRANSFORMER |
|  | WATER GATE |
| EXH | EXHAUST VENT |
|  | AIR VENT |
|  | DRAINAGE SUMP |
|  | EMH ELECTRIC MANHOLE |
|  | SMH SEWER MANHOLE |
|  | DMH DRAIN MANHOLE |
|  | TMH TELEPHONE MANHOLE |
|  | DRAINAGE CATCH BASIN |
|  | DOOR W/ THRESHOLD |
|  | HYDRANT |
|  | POST INDICATOR VALVE |
|  | UTILITY POLE |
|  | YARD LIGHT |

LINE DESIGNATORS

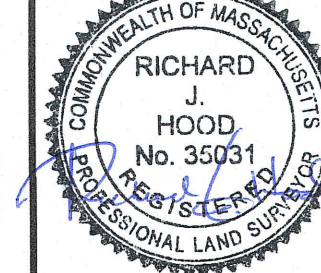
- | | |
|---|----------------------|
|  | WATER MAIN |
|  | HANDRAIL |
|  | JERSEY BARRIER |
|  | GUARD RAIL |
|  | OVERHEAD WIRES |
|  | GAS LINE |
|  | WATER SERVICE |
|  | UNDERGROUND ELECTRIC |
|  | STORM DRAIN LINE |
|  | SANITARY SEWER LINE |
|  | DRAINAGE SWALE |
|  | CHAIN LINK FENCE |

[illegible]

MCKENZIE
ENGINEERING GROUP
Assinippi Office Park
150 Longwater Drive, Suite 101
Norwell, MA 02061
P: 781.792.3900
F: 781.792.0333
www.mckeng.com

EXISTING CONDITIONS PLAN
(ASSESSOR'S MAP 57, PARCEL 70)
320 CONCORD STREET
ROCKLAND, MASSACHUSETTS

PROFESSIONAL SURVEYOR



OWNERS/APPLICANT:
WALL STREET DEVELOPMENT
CORP.
2 WARTHIN CIRCLE
NORWOOD, MASSACHUSETTS 02062

NOT FOR CONSTRUCTION

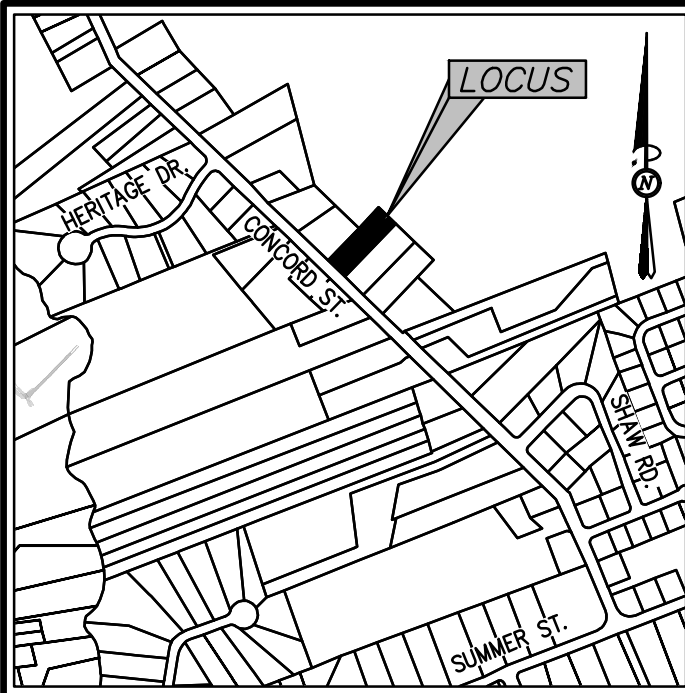
DRAWN BY:	ES
DESIGNED BY:	ES
CHECKED BY:	RTL
APPROVED BY:	RJ
DATE:	OCTOBER 7, 2021
SCALE:	1"=20'
PROJECT NO.:	221-18
DWG. TITLE:	

EXISTING
CONDITIONS
PLAN

DWG. NO.

EX-1

© MCKENZIE ENGINEERING GROUP, INC.



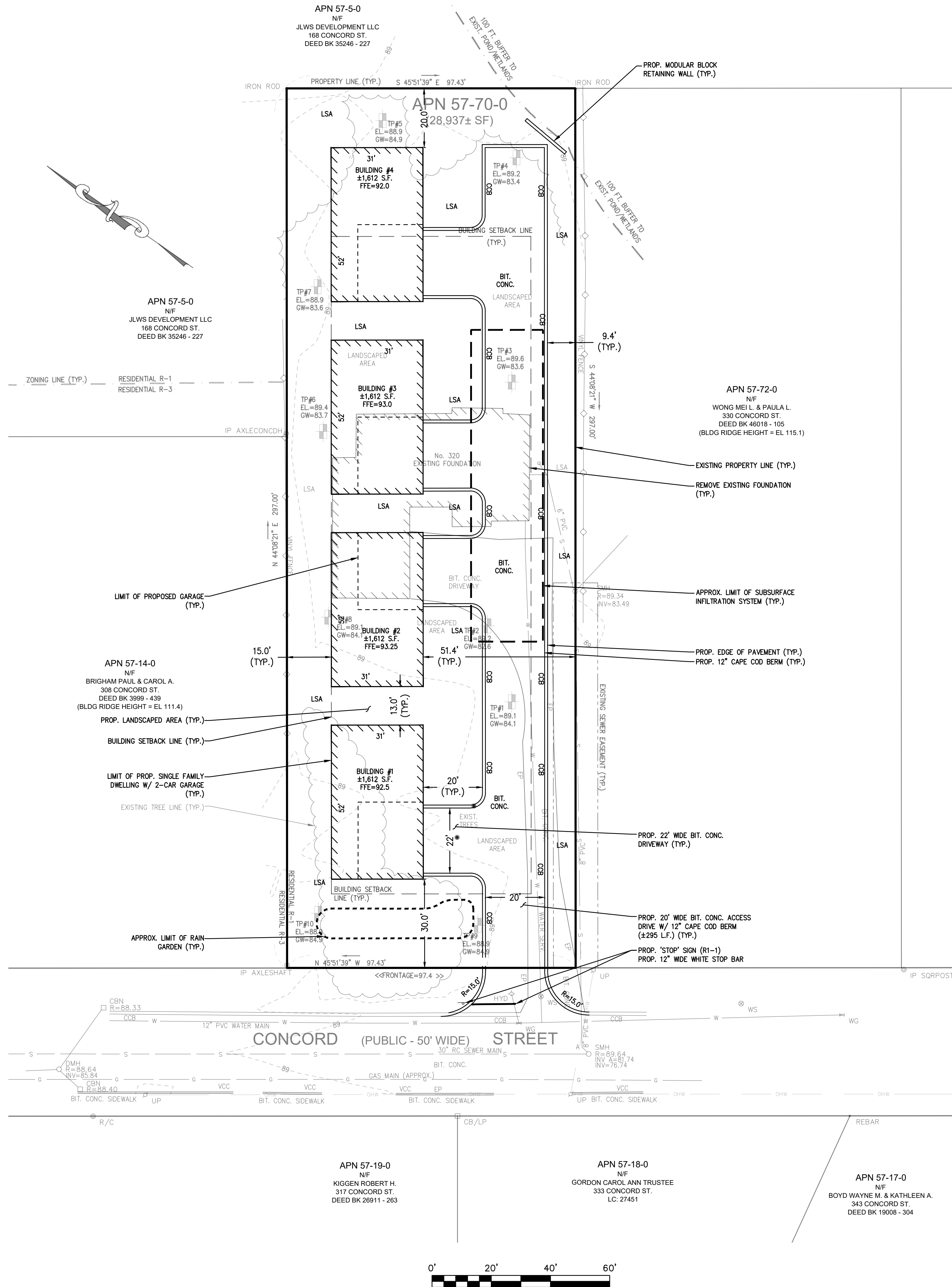
LOCUS MAP
Not to Scale

LAND USAGE TABLES

ARTICLE V – BUILDING, LOT AND GENERAL DISTRICT REGULATIONS

RESIDENTIAL (R-1) ZONING DISTRICT			
CRITERIA	REQUIRED	EXISTING	PROPOSED
MIN. LOT AREA	32,670 S.F.	28,937 S.F.	28,937 S.F.
MIN. FRONTAGE AND LOT WIDTH	110 FT.	97.4 FT.	97.4 FT.
MAX. HEIGHT	2.5 STORIES/30 FT.*	1 STORY	<2.5 STORIES
MAX. BUILDING COVERAGE	25%	10.2%	22.3%
MAX. DWELLING UNITS PER 32,670 S.F.	1	1	4.5
MIN. FRONT YARD	25 FT.	124.7 FT.	30.0 FT.
MIN. SIDE YARD	15 FT.	15.4 FT.	15.0 FT.
MIN. REAR YARD	50 FT.	107.9 FT.	20.0 FT.
TOTAL IMPERVIOUS AREA	–	5,639 S.F.	14,512 S.F.

* THE MAXIMUM HEIGHT (STORIES/FEET) MAY BE INCREASED TO 3.0/36 ON LOTS WITH AN AREA OF 32,670 S.F. OR GREATER AND THAT THE STRUCTURE MEETS ALL THE CURRENT SETBACKS.



ABBREVIATIONS
FFE FIRST FLOOR ELEVATION
BIT CONC. BITUMINOUS CONCRETE PAVEMENT
CCB CAPE COD BERM
EP EDGE OF PAVEMENT
BC BITUMINOUS CONCRETE CURB
(AM) AS MEASURED
RET WALL RETAINING WALL
CONC. CONCRETE
RCP REINFORCED CONCRETE PIPE
VCC VERTICAL GRANITE CURB
ETW EDGE OF TRAVEL WAY
MTL METAL BERM
VCC VERTICAL CONCRETE CURB
CMP CORRUGATED METAL PIPE
LSA LANDSCAPED AREA

LEGEND

SURVEY SYMBOLS

- REBAR
- ANGLE IRON
- CONCRETE BOUND WITH DRILL HOLE
- STONE BOUND
- STONE BOUND

UTILITY SYMBOLS

- CHIMNEY
- ELECTRIC HAND HOLE
- GUY POLE
- GUY WIRE
- HVAC UNIT
- BUILDING LIGHT W/MAST
- BUILDING LIGHT TRANSFORMER
- WATER GATE
- EXHAUST VENT
- AIR VENT
- DRAINAGE SUMP
- ELECTRIC MANHOLE
- SEWER MANHOLE
- DRAIN MANHOLE
- TELEPHONE MANHOLE
- DRAINAGE CATCH BASIN
- DOOR WAY THRESHOLD
- HYDRANT
- POST INDICATOR VALVE
- UTILITY POLE
- YARD LIGHT
- RIP RAP
- BOLLARD
- SIGN
- FIRE ALARM
- DECIDUOUS TREE
- CONIFEROUS TREE

LINE DESIGNATORS

- WATER MAIN
- HANDRAIL
- JERSEY BARRIER
- GUARD RAIL
- OVERHEAD WIRES
- GAS LINE
- WATER SERVICE
- UNDERGROUND ELECTRIC
- STORM DRAIN LINE
- SANITARY SEWER LINE
- DRAINAGE SWALE
- CHAIN LINK FENCE

SITE DEVELOPMENT PLANS (ASSESSOR'S MAP 57, PARCEL 70) 320 CONCORD STREET ROCKLAND, MASSACHUSETTS

PROFESSIONAL ENGINEER:



OWNERS/APPLICANT:
WALL STREET DEVELOPMENT
CORP.
2 WARTHIN CIRCLE
NORWOOD, MASSACHUSETTS 02062

PERMIT PLAN SET

DRAWN BY: ESS
DESIGNED BY: ESS
CHECKED BY: BCM
APPROVED BY: BCM
DATE: OCTOBER 7, 2021
SCALE: 1"=20'
PROJECT NO.: 221-187
DWG. TITLE:

SITE LAYOUT PLANS

DWG. NO:

C-1

© MCKENZIE ENGINEERING GROUP, INC.

M:\MEG\2021 PROJECTS\221-187 WALL ST. DEV. CORP. - 320 CONCORD ST., ROCKLAND\DWGS\221-187 MAIN3_RAINGARDEN.DWG

























LEGEND

SURVEY SYMBOLS

- | | | |
|-------|--------------------------|--------------------------------|
| | • | REBAR |
| | ✓ | ANGLE IRON |
| CB/DH | <input type="checkbox"/> | CONCRETE BOUND WITH DRILL HOLE |
| SB | <input type="checkbox"/> | STONE BOUND |
| SB/DH | <input type="checkbox"/> | STONE BOUND |

UTILITY SYMBOLS

- | | |
|---|-----------------------|
|  | CHIMNEY |
|  | ELECTRIC HAND HOLE |
|  | GUY POLE |
|  | GUY WIRE |
|  | HVAC UNIT |
|  | BUILDING LIGHT W/MAST |
|  | BUILDING LIGHT |
|  | TRANSFORMER |
|  | WATER GATE |
|  | EXHAUST VENT |
|  | AIR VENT |
|  | DRAINAGE SUMP |
|  | EMH |
|  | SEWER MANHOLE |
|  | DRAIN MANHOLE |
|  | TELEPHONE MANHOLE |
|  | DRAINAGE CATCH BASIN |
|  | DOOR WAY THRESHOLD |
|  | HYDRANT |
|  | POST INDICATOR VALVE |
|  | UTILITY POLE |
|  | YARD LIGHT |

LINE DESIGNATORS

- | | |
|-----|----------------------|
| W | WATER MAIN |
| | HANDRAIL |
| | JERSEY BARRIER |
| | GUARD RAIL |
| CHW | OVERHEAD WIRES |
| G | GAS LINE |
| WS | WATER SERVICE |
| E | UNDERGROUND ELECTRIC |
| D | STORM DRAIN LINE |
| S | SANITARY SEWER LINE |
| | DRAINAGE SWALE |
| X | CHAIN LINK FENCE |

DRAINAGE NOTES:

1. ALL EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY EARTH MOVING ACTIVITIES.
2. THE CONTRACTOR SHALL KEEP ON SITE AT ALL TIMES, ADDITIONAL SILTATION FENCING AND FILTER FABRIC FOR INSTALLATION AS DIRECTED BY THE TOWN TO MITIGATE ANY EMERGENCY CONDITIONS.
3. UPON COMPLETION OF ALL SITE WORK THE CONTRACTOR SHALL INSPECT ALL ON-SITE AND OFF-SITE CATCH BASINS (THAT RECEIVED CATCH BASIN PROTECTION) AND DRAINAGE MANHOLES AND REMOVE ALL SEDIMENT AND DEBRIS THAT HAS ACCUMULATED DURING THE COURSE OF CONSTRUCTION.
4. ALL SOILS LOCATED WITHIN THE LIMITS OF THE SUBSURFACE INFILTRATION SYSTEMS SHALL BE REMOVED PRIOR TO INSTALLATION OF THE SYSTEM. THE BOTTOM OF EXCAVATION SHALL BE INSPECTED BY THE PROJECT ENGINEER PRIOR TO THE PLACEMENT OF THE SUBSURFACE CHAMBERS.
5. SUBSURFACE INFILTRATION SYSTEM SUBSOIL SHALL BE OVEREXCAVATED UNTIL THE NATIVE SAND MATERIALS ARE ENCOUNTERED (SUBSURFACE SYSTEM, C1 (SAND) LAYER AT APPROX. EL 86.2). THE SUBSURFACE INFILTRATION SYSTEM SHALL BE PLACED OVER IMPORTED SAND CONFORMING WITH THE REQUIREMENTS OF THE MASSACHUSETTS SANITARY CODE (TITLE V) AS NEEDED.

[illegible]

SITE DEVELOPMENT PLANS
(ASSESSOR'S MAP 57, PARCEL 70)
320 CONCORD STREET
ROCKLAND, MASSACHUSETTS

PROFESSIONAL ENGINEER:



APPLICANT:
WALL STREET DEVELOPMENT
CORP.
 2 WARTHIN CIRCLE
 NORWOOD, MASSACHUSETTS 02062

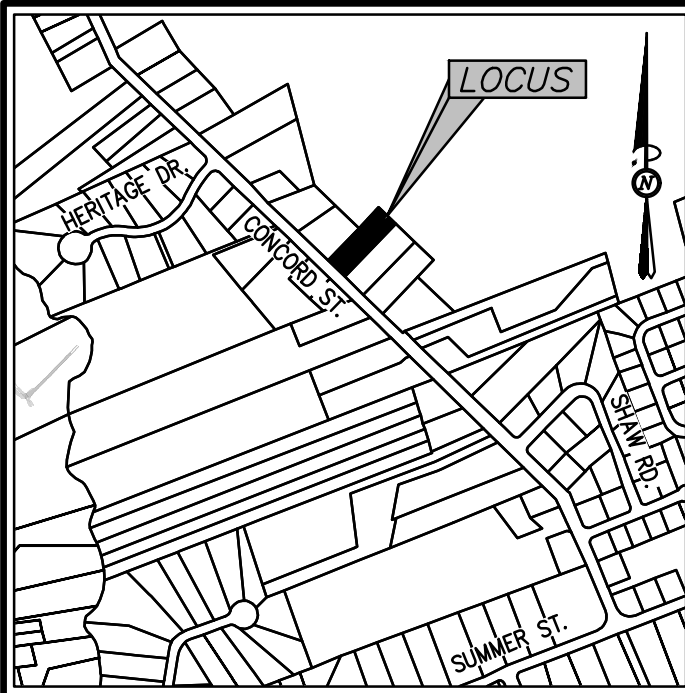
PERMIT PLAN SET

DRAWN BY:	ESS
DESIGNED BY:	ESS
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	OCTOBER 7, 2021
SCALE:	1"=20'
PROJECT NO.:	221-187

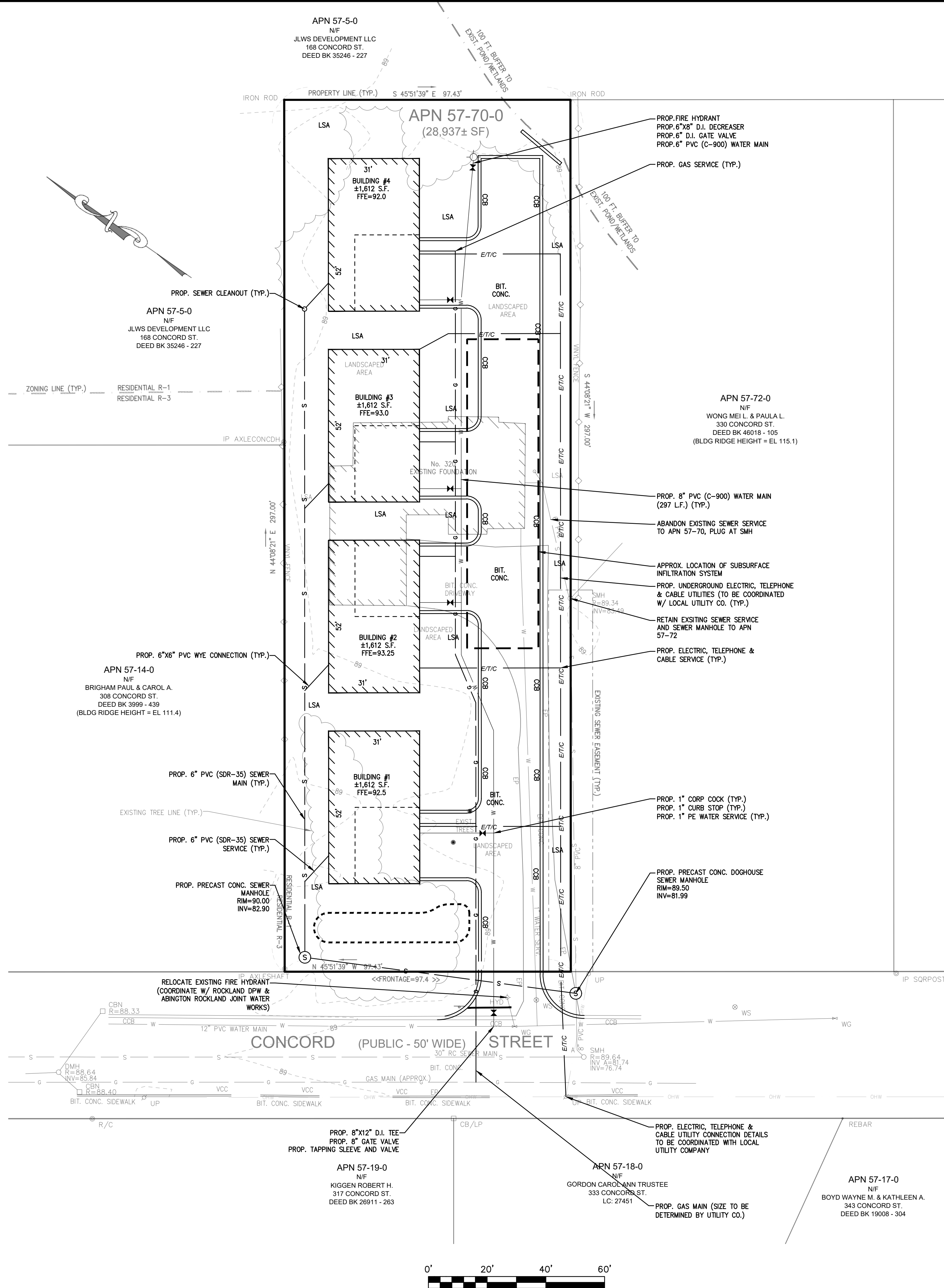
GRADING & DRAINAGE PLAN

DWG. NO:

C-2



LOCUS MAP
Not to Scale



ABBREVIATIONS	
F.F.E.	FIRST FLOOR ELEVATION
BIT CONC.	BITUMINOUS CONCRETE PAVEMENT
CCB	CAPE COD BERM
EP	EDGE OF PAVEMENT
BC	BITUMINOUS CONCRETE CURB
(AM)	AS MEASURED
RET WALL	RETAINING WALL
CONC.	CONCRETE
RCP	REINFORCED CONCRETE PIPE
VCC	VERTICAL GRANITE CURB
ETW	EDGE OF TRAVEL WAY
MTL	METAL BERM
VCC	VERTICAL CONCRETE CURB
CMP	CORRUGATED METAL PIPE
LSA	LANDSCAPED AREA

LEGEND	
SURVEY SYMBOLS	
•	REBAR
∨	ANGLE IRON
CB/DH	CONCRETE BOUND WITH DRILL HOLE
SB	STONE BOUND
SB/DH	STONE BOUND
UTILITY SYMBOLS	
CHIMNEY	CHIMNEY
ELECTRIC HAND HOLE	ELECTRIC HAND HOLE
GUY POLE	GUY POLE
HVAC UNIT	HVAC UNIT
BUILDING LIGHT W/MAST	BUILDING LIGHT W/MAST
TRANSFORMER	TRANSFORMER
WATER GATE	WATER GATE
EXHAUST VENT	EXHAUST VENT
AIR VENT	AIR VENT
DRAINAGE SUMP	DRAINAGE SUMP
EMH	ELECTRIC MANHOLE
SMH	SEWER MANHOLE
DMH	DRAIN MANHOLE
TMH	TELEPHONE MANHOLE
CSN	DRAINAGE CATCH BASIN
DOOR WAY THRESHOLD	DOOR WAY THRESHOLD
HYDRANT	HYDRANT
POST INDICATOR VALVE	POST INDICATOR VALVE
UTILITY POLE	UTILITY POLE
YARD LIGHT	YARD LIGHT
RIP RAP	RIP RAP
BOLLARD	BOLLARD
SIGN	SIGN
FIRE ALARM	FIRE ALARM
DECIDUOUS TREE	DECIDUOUS TREE
CONIFEROUS TREE	CONIFEROUS TREE
LINE DESIGNATORS	
W	WATER MAIN
HANDRAIL	HANDRAIL
JERSEY BARRIER	JERSEY BARRIER
GUARD RAIL	GUARD RAIL
OVERHEAD WIRES	OVERHEAD WIRES
GAS LINE	GAS LINE
WATER SERVICE	WATER SERVICE
UNDERGROUND ELECTRIC	UNDERGROUND ELECTRIC
STORM DRAIN LINE	STORM DRAIN LINE
SANITARY SEWER LINE	SANITARY SEWER LINE
DRAINAGE SWALE	DRAINAGE SWALE
CHAIN LINK FENCE	CHAIN LINK FENCE

UTILITY NOTES:

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCHMARKS NECESSARY FOR THE WORK.
- THE CONTRACTOR SHALL COORDINATE ALL STREET WORK WITH THE ROCKLAND DPW.
- THE CONTRACTOR SHALL EXCAVATE THE TEST PITS PRIOR TO INSTALLING THE DOMESTIC WATER SERVICE TO VERIFY THE ELEVATIONS AND LOCATIONS OF EXISTING UTILITIES. THE CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH THE RESULTS PRIOR TO COMMENCING ANY WORK.
- THE WATER SERVICE SHALL BE INSTALLED WITH 5' OF COVER EXCEPT AS NOTED OR DETAILED OTHERWISE.
- ALL WATER SERVICE APPURTENANCES, MATERIALS, METHODS OF INSTALLATION SHALL MEET OR EXCEED ALL LOCAL MUNICIPAL REQUIREMENTS.
- THE DOMESTIC WATER SERVICE SHALL BE ADEQUATELY PROTECTED AGAINST BACKFLOW (BACKFLOW PREVENTION) AT THE BUILDING.
- AFTER PRESSURE TESTING AND CHLORINATION IS COMPLETED, SAMPLES SHALL BE TAKEN FROM THE DOMESTIC WATER SERVICE AND SHALL BE TESTED AT 200 PSI FOR A MINIMUM OF 2 HOURS. THE CONTRACTOR IS REQUIRED TO NOTIFY THE ABINGTON ROCKLAND JOINT WATER WORKS AT LEAST 24 HOURS PRIOR TO THE TESTING.
- THE DOMESTIC WATER SERVICE SHALL BE TESTED IN ACCORDANCE WITH DEPARTMENT OF ENVIRONMENTAL PROTECTION REGULATIONS. A MINIMUM OF 2 SEPARATE WATER SAMPLES SHALL BE TESTED AT A STATE CERTIFIED LABORATORY. A MINIMUM OF 10 FEET CLEAR HORIZONTALLY SHALL BE MAINTAINED BETWEEN SANITARY SEWER SERVICES AND WATER SERVICE. WHENEVER CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET TO A WATER SERVICE THE ELEVATION OF THE CROWN OF THE SEWER SHALL BE AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER SERVICE. ALL OTHER UTILITIES REQUIRE MINIMUM 5' SEPARATION FROM OTHER UTILITIES.
- ALL GRAVITY SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) SDR-35 UNLESS OTHERWISE NOTED.
- WHERE SANITARY SEWERS CROSS WATER MAINS, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER MAIN. IF THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THIS REQUIREMENT, THE WATER MAIN SHALL BE RELOCATED TO PROVIDE THIS SEPARATION OR CONSTRUCTED WITH MECHANICAL-JOINT PIPE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE SEWER. ONE FULL LENGTH OF WATER MAIN SHALL BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. WHENEVER IT IS IMPOSSIBLE TO OBTAIN VERTICAL SEPARATION AS STIPULATED ABOVE, BOTH THE WATER MAIN AND THE SEWER MAIN SHALL BE ENCASED IN CONCRETE FOR A MINIMUM DISTANCE OF 10 FEET FROM THE CROSSING POINT OF THE OTHER PIPE AS MEASURED NORMALLY FROM ALL POINTS ALONG THE PIPE.
- THE LOCATIONS OF PROPOSED ELECTRIC, TELEPHONE AND COMMUNICATION (E.T.C.) SERVICES ARE APPROXIMATE. THE PROJECT ELECTRICAL ENGINEER SHALL VERIFY THESE LOCATIONS PRIOR TO THE START OF CONSTRUCTION. COORDINATE ALL E.T.C. WORK WITH THE APPROPRIATE UTILITY COMPANIES.
- THE PROPOSED GAS SERVICE LOCATION IS APPROXIMATE ONLY. THE CONTRACTOR SHALL COORDINATE THE GAS SERVICE INSTALLATION WITH THE MUNICIPAL GAS COMPANY.
- ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH ROCKLAND DEPARTMENT OF PUBLIC WORKS AND ABINGTON ROCKLAND JOINT WATER WORKS SPECIFICATIONS.
- ALL EXISTING UTILITIES WITHIN THE SITE ARE TO BE REMOVED UNLESS OTHERWISE STATED TO REMAIN.

BY	APP	DESCRIPTION	DATE	REV
ESS	BCM	DRAINAGE & UTILITIES	11/30/21	1

MCKENZIE ENGINEERING GROUP
Assinippi Office Park
150 Longwater Drive, Suite 101
Norwell, MA 02061
P: 781.792.3900
F: 781.792.0333
www.mckeng.com

SITE DEVELOPMENT PLANS
(ASSESSOR'S MAP 57, PARCEL 70)
320 CONCORD STREET
ROCKLAND, MASSACHUSETTS

PROFESSIONAL ENGINEER:

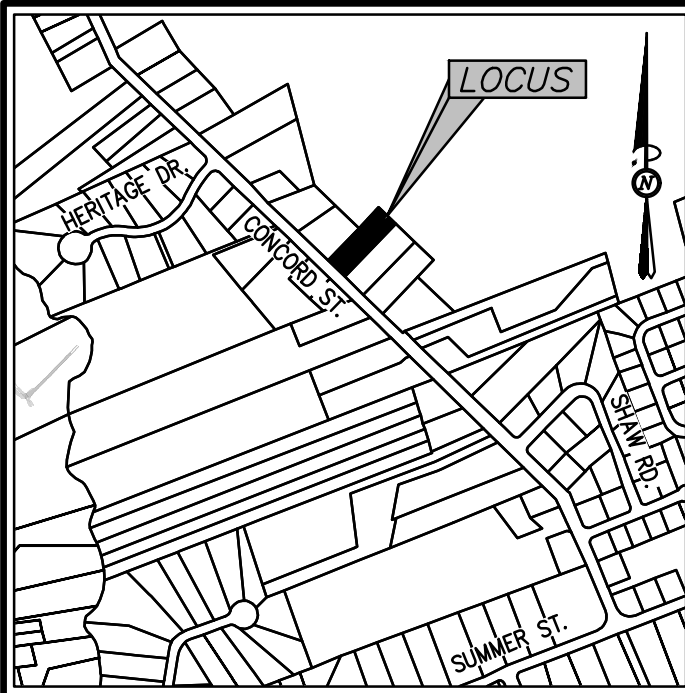
BRADLEY C. MCKENZIE
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING

OWNERS/APPLICANT:
WALL STREET DEVELOPMENT CORP.
2 WARTHIN CIRCLE
NORWOOD, MASSACHUSETTS 02062

DRAWN BY: ESS
DESIGNED BY: ESS
CHECKED BY: BCM
APPROVED BY: BCM
DATE: OCTOBER 7, 2021
SCALE: 1"=20'
PROJECT NO.: 221-187
DWG. TITLE:

UTILITY PLAN

DWG. NO.: **C-3**



LOCUS MAP
Not to Scale

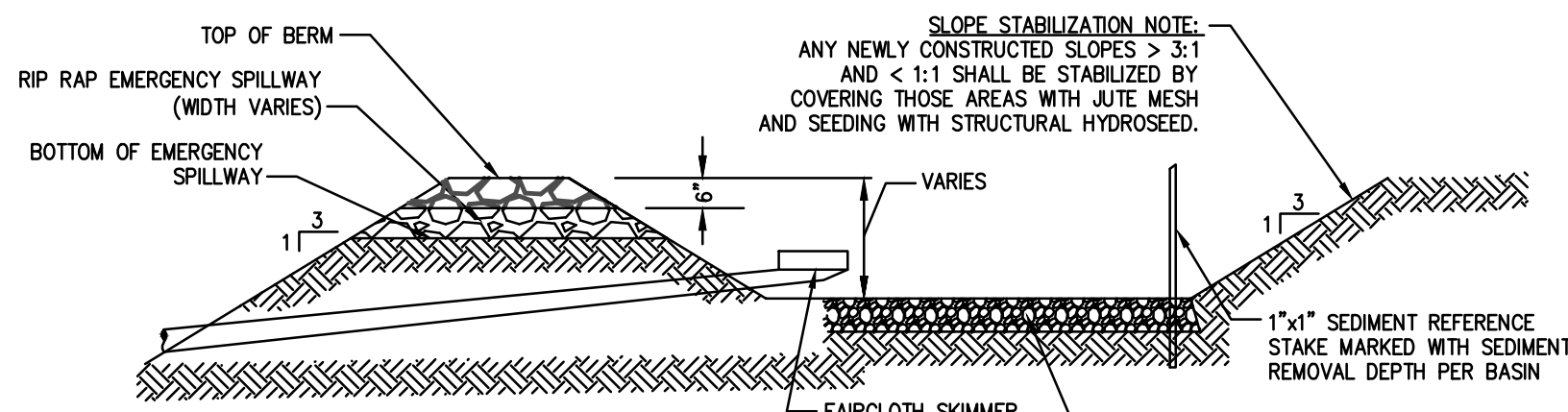
CONSTRUCTION PHASE BMP OPERATION AND MAINTENANCE NOTES:

- STRUCTURAL PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE SILT SOCK EROSION CONTROL BARRIERS, STABILIZED CONSTRUCTION ENTRANCES, CONCRETE WASH STATIONS, STOCKPILE AREAS, AND INLET PROTECTION.
- STABILIZATION PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE TEMPORARY SEEDING, GEOTEXTILES (JUTE MESH), MULCHING, AND PERMANENT SEEDING.
- OPERATOR PERSONNEL AND/OR ITS CONSULTANTS MUST INSPECT THE CONSTRUCTION SITE AT LEAST ONCE EVERY 7 CALENDAR DAYS OR EVERY 14 CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT $\frac{1}{8}$ INCH OR GREATER. THE INSPECTOR SHOULD REVIEW THE EROSION AND SEDIMENT CONTROLS WITH RESPECT TO THE FOLLOWING:
 - WHETHER OR NOT THE BMP WAS INSTALLED/PERFORMED CORRECTLY.
 - WHETHER OR NOT THERE HAS BEEN DAMAGE TO THE BMP SINCE IT WAS INSTALLED OR PERFORMED.
 - WHAT SHOULD BE DONE TO CORRECT ANY PROBLEMS WITH THE BMP.
- THE INSPECTOR SHALL COMPLETE THE INSPECTION SCHEDULE AND EVALUATION CHECKLIST FOR FINDINGS AND SHOULD REQUEST THE REQUIRED MAINTENANCE OR REPAIR.
- ALL SLOPES EXCEEDING 15% RESULTING FROM SITE GRADING SHALL BE BOTH COVERED WITH FOUR INCHES OF TOPSOIL AND PLANTED WITH A VEGETATED COVER SUFFICIENT TO PREVENT EROSION.

CONSTRUCTION SEQUENCE

TO PREVENT EXCESSIVE EROSION AND SILTING, THE FOLLOWING CONSTRUCTION SEQUENCE COUPLED WITH OTHER WIDELY ACCEPTED PRINCIPALS FOR REDUCING EROSION AND SEDIMENTATION SHALL BE IMPLEMENTED IN THE DEVELOPMENT OF THE SITE.

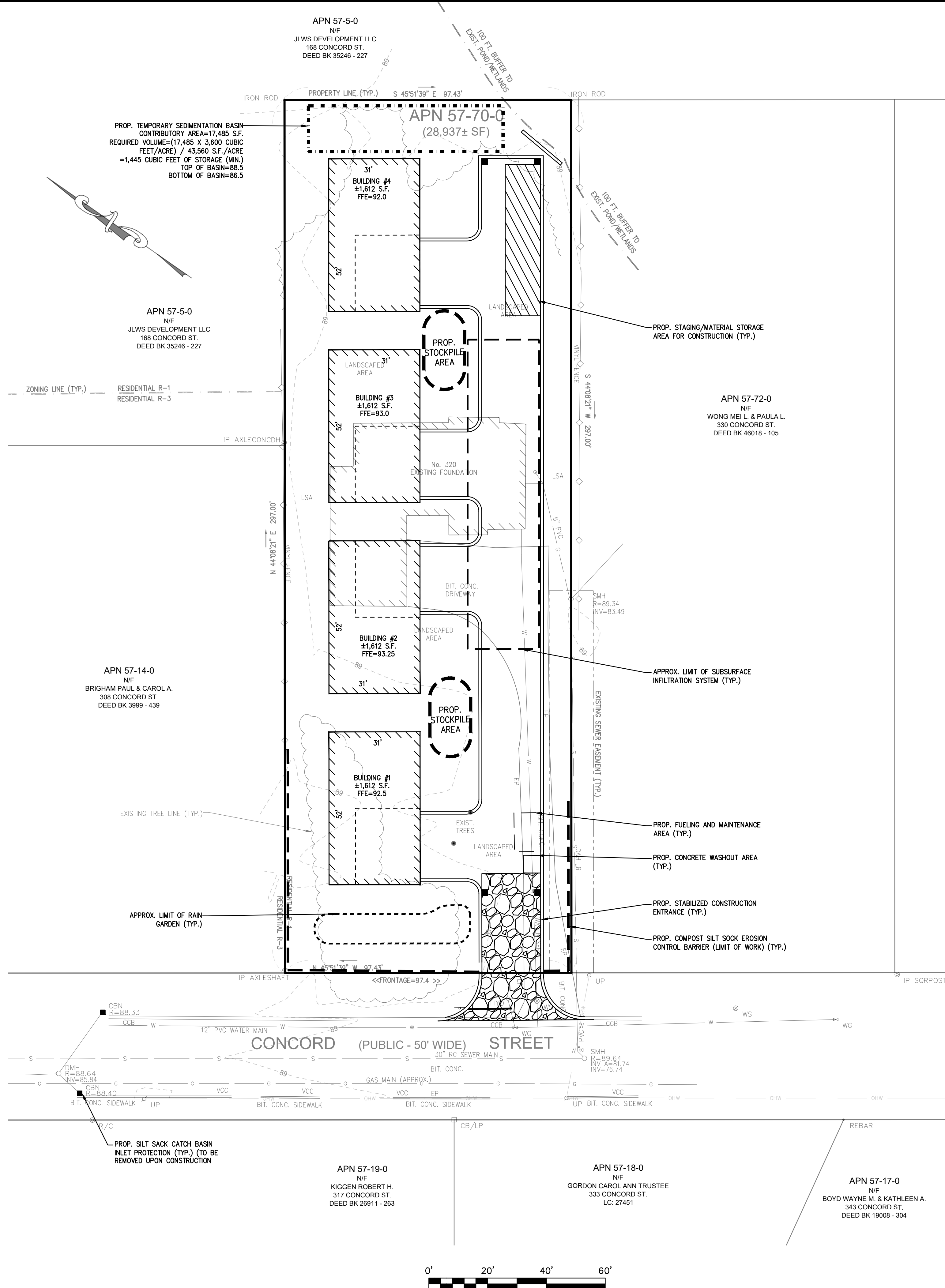
- THE CONTRACTOR SHALL COORDINATE A PRE-CONSTRUCTION MEETING PRIOR TO ANY CONSTRUCTION ACTIVITY.
- STABILIZATION PRACTICES FOR EROSION AND SEDIMENT CONTROL SHALL BE INSTALLED PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. REFER TO "EROSION AND SEDIMENTATION CONTROL" SECTION OF THIS PLAN & PLACE SILTATION FENCE ON THE SITE PLANS.
- CLEAR AND GRUB UP AS REQUIRED FOR THE CONSTRUCTION OF THE ROADWAY, PARKING AREAS AND RELATED INFRASTRUCTURE.
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.
- EXCAVATE TOPSOIL AND SUBSOIL FROM CUT AND FILL AREAS AND STOCKPILE ON SITE IN LOCATIONS SHOWN ON THE PLAN. CONSIDERATION SHOULD BE GIVEN TO LOCATING STOCKPILES ON THE UPHILL SIDE OF DISTURBED AREAS, WHERE POSSIBLE, TO ACT AS TEMPORARY DIVERSIONS.
- CONSTRUCT CUT AND FILL AREAS, INSTALLING HAYBALE CHECK DAMS AT TOES OF ALL 3:1 OR GREATER SLOPES, AND AT ENDS OF ALL CUT AREAS. ALL FILL WILL BE INSTALLED USING 12" MAXIMUM COMPACTION LIFTS. PLACE ALL SLOPE PROTECTION WHERE INDICATED ON THE PLAN. THE SUBSURFACE INFILTRATION SYSTEM SHALL BE CONSTRUCTED IMMEDIATELY AFTER THE ROADWAY ROUGH GRADING IS COMPLETED AND THE AREA HAS BEEN CLEARED OF VEGETATION.
- INSTALL CLOSED DRAINAGE SYSTEM AND OTHER UTILITIES. ALL CATCH BASINS SHALL BE COVERED WITH SILTSACK OR EQUIVALENT INLET PROTECTION.
- GRADE ROADWAY TO SUBGRADE ELEVATION AND CONSTRUCT SIDE SLOPES. APPLY TEMPORARY STABILIZATION MEASURES WHERE WARRANTED. REFER TO "EROSION AND SEDIMENTATION CONTROL" SECTION OF THIS PLAN.
- PLACE GRAVEL SUBBASE.
- PLACE THE BITUMINOUS CONCRETE BINDER COURSE ON ROADWAY AND PARKING AREAS.
- GRADE SLOPES AND STABILIZE CUT AREAS AT TOE OF SLOPES. BLEND ALL SLOPES INTO EXISTING TOPOGRAPHY AND LOAM AND SEED ALL DISTURBED AREAS. SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH JUTE MESH.
- PLACE THE FINAL WEARING COURSE OF PAVEMENT.
- COMPLETE FINE GRADING OF SHOULDERS AND PLACE PAVEMENT IN MISCELLANEOUS AREAS.
- REMOVE TEMPORARY EROSION CONTROL DEVICES ONCE ADEQUATE GROWTH IS ESTABLISHED. ADEQUATE GROWTH IS DEFINED AS VEGETATION COVERING 75% OR MORE OF THE GROUND SURFACE.



VOLUME REQUIREMENTS FOR TEMPORARY SEDIMENTATION BASINS
TEMPORARY SEDIMENTATION BASINS SHALL HAVE A MINIMUM VOLUME BASED ON 3,600 Cu. Ft. OF STORAGE FOR EACH ACRE DRAINED TO BASIN.

CONSTRUCTION NOTE:
TEMPORARY SEDIMENTATION BASINS SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO LOCATIONS SHOWN ON THE PLAN, BUT SITE CONDITION SUCH AS SOILS, POOL AREA, AND SPILLWAY CONDITIONS SHALL BE CONSIDERED. CONTRACTOR SHALL HAVE THE FLEXIBILITY TO ADJUST LOCATIONS AS LONG AS REQUIRED VOLUME IS PROVIDED.

TEMPORARY SEDIMENTATION BASIN
NOT TO SCALE



ABBREVIATIONS	
FTE	FIRST FLOOR ELEVATION
BIT CONC.	BITUMINOUS CONCRETE PAVEMENT
CCB	CAPE COD BERM
EP	EDGE OF PAVEMENT
BC	BITUMINOUS CONCRETE CURB
(AM)	AS MEASURED
RET. WALL	RETAINING WALL
CONC.	CONCRETE
RCP	REINFORCED CONCRETE PIPE
VCC	VERTICAL GRANITE CURB
ETW	EDGE OF TRAVEL WAY
MTL	METAL BERM
VCC	VERTICAL CONCRETE CURB
CMP	CORRUGATED METAL PIPE
LSA	LANDSCAPED AREA

LEGEND

SURVEY SYMBOLS

- REBAR
- ANGLE IRON
- CONCRETE BOUND WITH DRILL HOLE
- STONE BOUND
- STONE BOUND

UTILITY SYMBOLS

- CHIMNEY
- ELECTRIC HAND HOLE
- GUY POLE
- GUY WIRE
- HVAC UNIT
- BUILDING LIGHT W/MAST
- BUILDING LIGHT TRANSFORMER
- WATER GATE
- EXHAUST VENT
- AIR VENT
- DRAINAGE SUMP
- EMH
- SMH
- DMH
- TMH
- CSN
- ELECTRIC MANHOLE
- SEWER MANHOLE
- DRAIN MANHOLE
- TELEPHONE MANHOLE
- DRAINAGE CATCH BASIN
- DOOR WAY THRESHOLD
- HYDRANT
- POST INDICATOR VALVE
- UTILITY POLE
- YARD LIGHT
- RIP RAP
- BOLLARD
- SIGN
- FIRE ALARM
- DECIDUOUS TREE
- CONIFEROUS TREE

LINE DESIGNATORS

- WATER MAIN
- HANDRAIL
- JERSEY BARRIER
- GUARD RAIL
- OVERHEAD WIRES
- GAS LINE
- WATER SERVICE
- UNDERGROUND ELECTRIC
- STORM DRAIN LINE
- SANITARY SEWER LINE
- DRAINAGE SWALE
- CHAIN LINK FENCE

SITE DEVELOPMENT PLANS (ASSESSOR'S MAP 57, PARCEL 70) 320 CONCORD STREET ROCKLAND, MASSACHUSETTS

PROFESSIONAL ENGINEER:



OWNERS/APPLICANT:

WALL STREET DEVELOPMENT
CORP.
2 WARTHIN CIRCLE
NORWOOD, MASSACHUSETTS 02062

PERMIT PLAN SET

DRAWN BY:	ESS
DESIGNED BY:	ESS
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	OCTOBER 7, 2021
SCALE:	1"=20'
PROJECT NO.:	221-187
DWG. TITLE:	

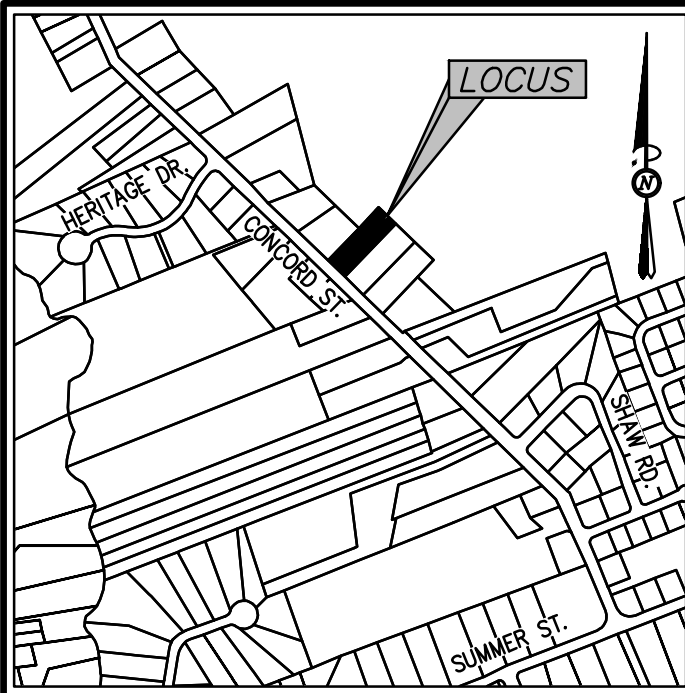
EROSION & SEDIMENT CONTROL PLAN

DWG. NO:

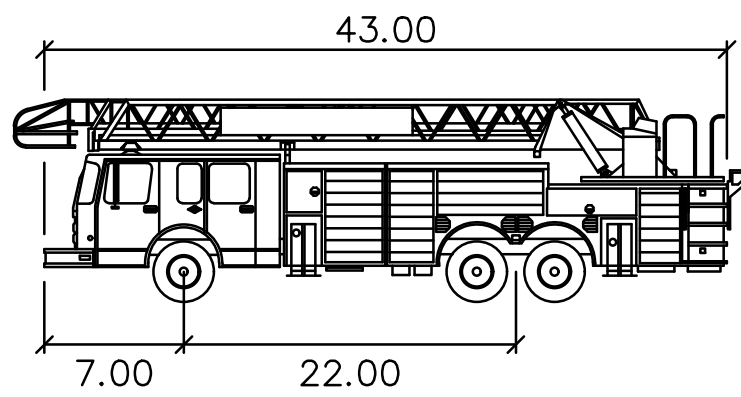
ESC-1

© MCKENZIE ENGINEERING GROUP, INC.

M:\MEG\2021 PROJECTS\221-187 WALL ST. DEV. CORP. - 320 CONCORD ST., ROCKLAND\DWGS\221-187 MAIN3_RAINGARDEN.DWG



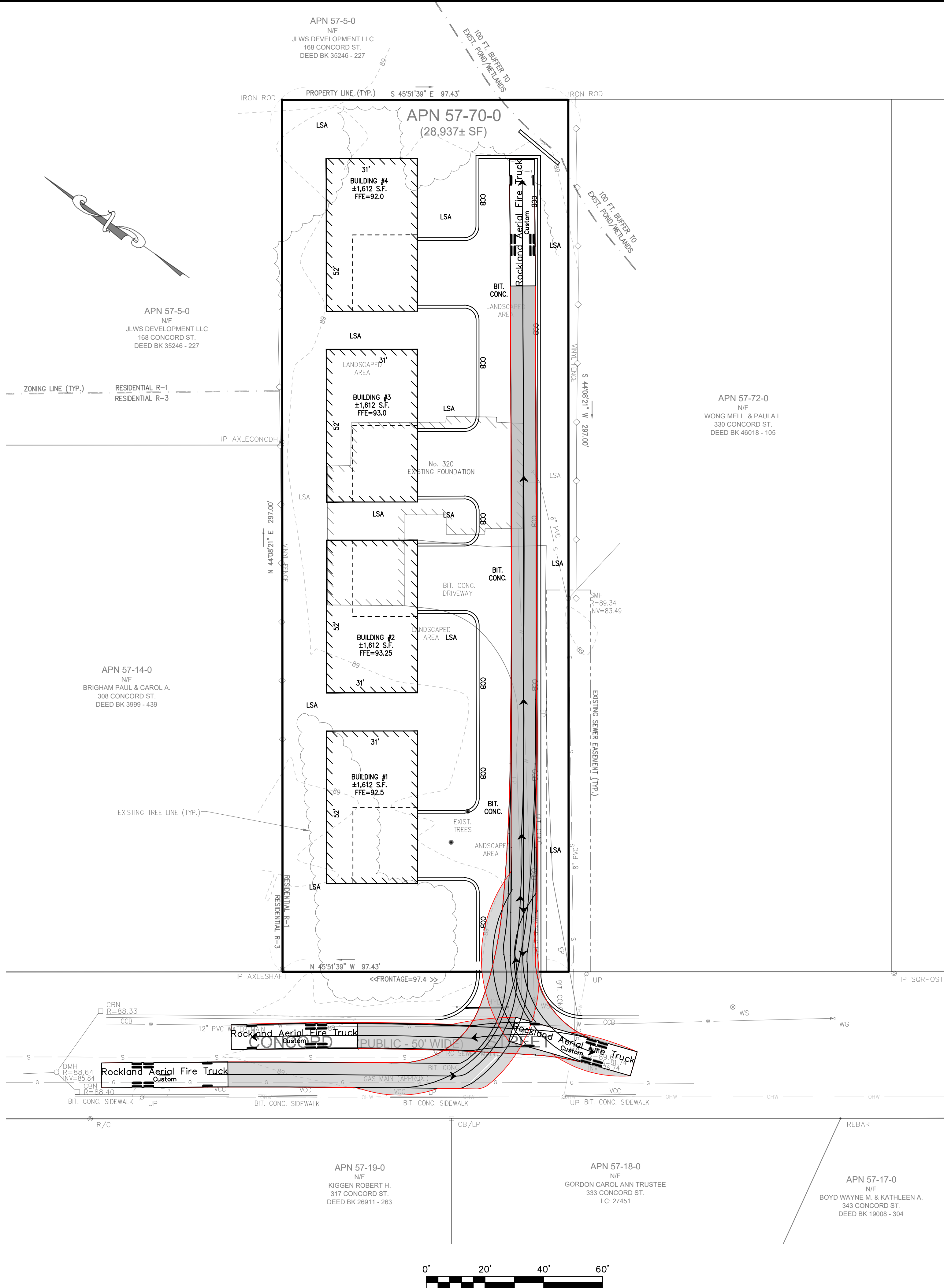
LOCUS MAP
Not to Scale



Aerial Fire Truck

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 33.3

NOTE: LIMIT OF BUMPER OVERHANG IS SHOWN IN RED. VEHICLE WHEEL PATH IS SHOWN AS BLACK LINES.



ABBREVIATIONS	
FFE	FIRST FLOOR ELEVATION
BIT CONC.	BITUMINOUS CONCRETE PAVEMENT
CCB	CAPE COD BERM
EP	EDGE OF PAVEMENT
BC	BITUMINOUS CONCRETE CURB
(AM)	AS MEASURED
RET. WALL	RETAINING WALL
CONC.	CONCRETE
RCP	REINFORCED CONCRETE PIPE
VGC	VERTICAL GRANITE CURB
ETW	EDGE OF TRAVEL WAY
MTL	METAL BERM
VCC	VERTICAL CONCRETE CURB
CMP	CORRUGATED METAL PIPE
LSA	LANDSCAPED AREA

LEGEND	
SURVEY SYMBOLS	
•	REBAR
∨	ANGLE IRON
CB/DH	CONCRETE BOUND WITH DRILL HOLE
SB	STONE BOUND
SB/DH	STONE BOUND
UTILITY SYMBOLS	
CHIMNEY	CHIMNEY
ELECTRIC HAND HOLE	ELECTRIC HAND HOLE
GUY POLE	GUY POLE
HVAC UNIT	HVAC UNIT
BUILDING LIGHT W/MAST	BUILDING LIGHT W/MAST
TRANSFORMER	TRANSFORMER
WATER GATE	WATER GATE
EXHAUST VENT	EXHAUST VENT
AIR VENT	AIR VENT
DRAINAGE SUMP	DRAINAGE SUMP
EMH	ELECTRIC MANHOLE
SMH	SEWER MANHOLE
DMH	DRAIN MANHOLE
TMH	TELEPHONE MANHOLE
CBN	DRAINAGE CATCH BASIN
DOOR WAY THRESHOLD	DOOR WAY THRESHOLD
HYDRANT	HYDRANT
POST INDICATOR VALVE	POST INDICATOR VALVE
UTILITY POLE	UTILITY POLE
YARD LIGHT	YARD LIGHT
RIP RAP	RIP RAP
BOLLARD	BOLLARD
SIGN	SIGN
FIRE ALARM	FIRE ALARM
DECIDUOUS TREE	DECIDUOUS TREE
CONIFEROUS TREE	CONIFEROUS TREE
LINE DESIGNATORS	
W	WATER MAIN
HANDRAIL	HANDRAIL
JERSEY BARRIER	JERSEY BARRIER
GUARD RAIL	GUARD RAIL
OHW	OVERHEAD WIRES
G	GAS LINE
WS	WATER SERVICE
E	UNDERGROUND ELECTRIC
D	STORM DRAIN LINE
S	SANITARY SEWER LINE
X	DRAINAGE SWALE
X	CHAIN LINK FENCE

REV	DATE	DESCRIPTION	BY	APP
1	11/30/21	DRAINAGE & UTILITIES	ESS	BCM

MG
MCKENZIE
ENGINEERING GROUP
Assinippi Office Park
150 Longwater Drive, Suite 101
Norwell, MA 02061
P: 781.792.3900
F: 781.792.0333
www.mckeng.com

SITE DEVELOPMENT PLANS
(ASSESSOR'S MAP 57, PARCEL 70)
320 CONCORD STREET
ROCKLAND, MASSACHUSETTS

PROFESSIONAL ENGINEER:

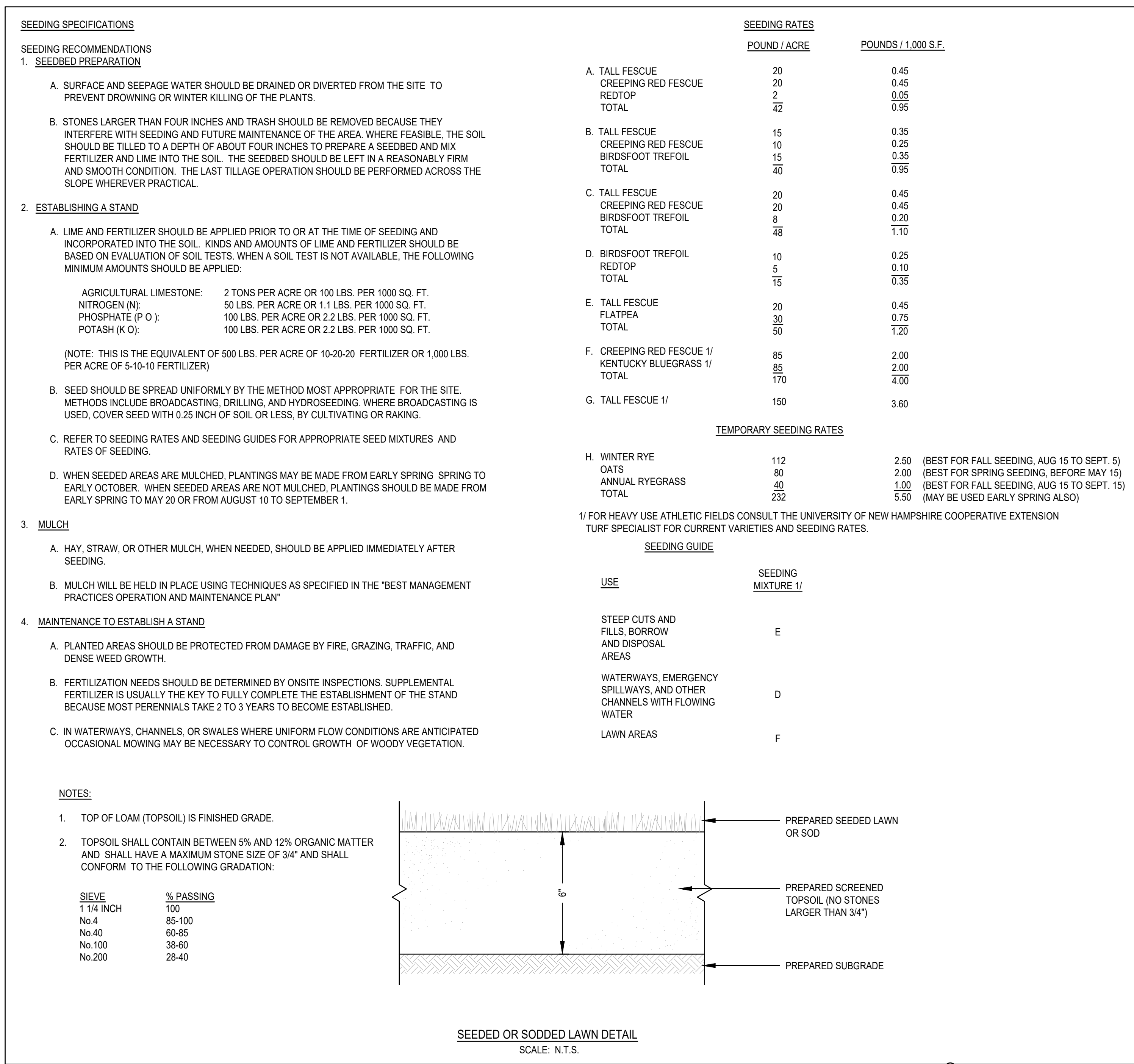
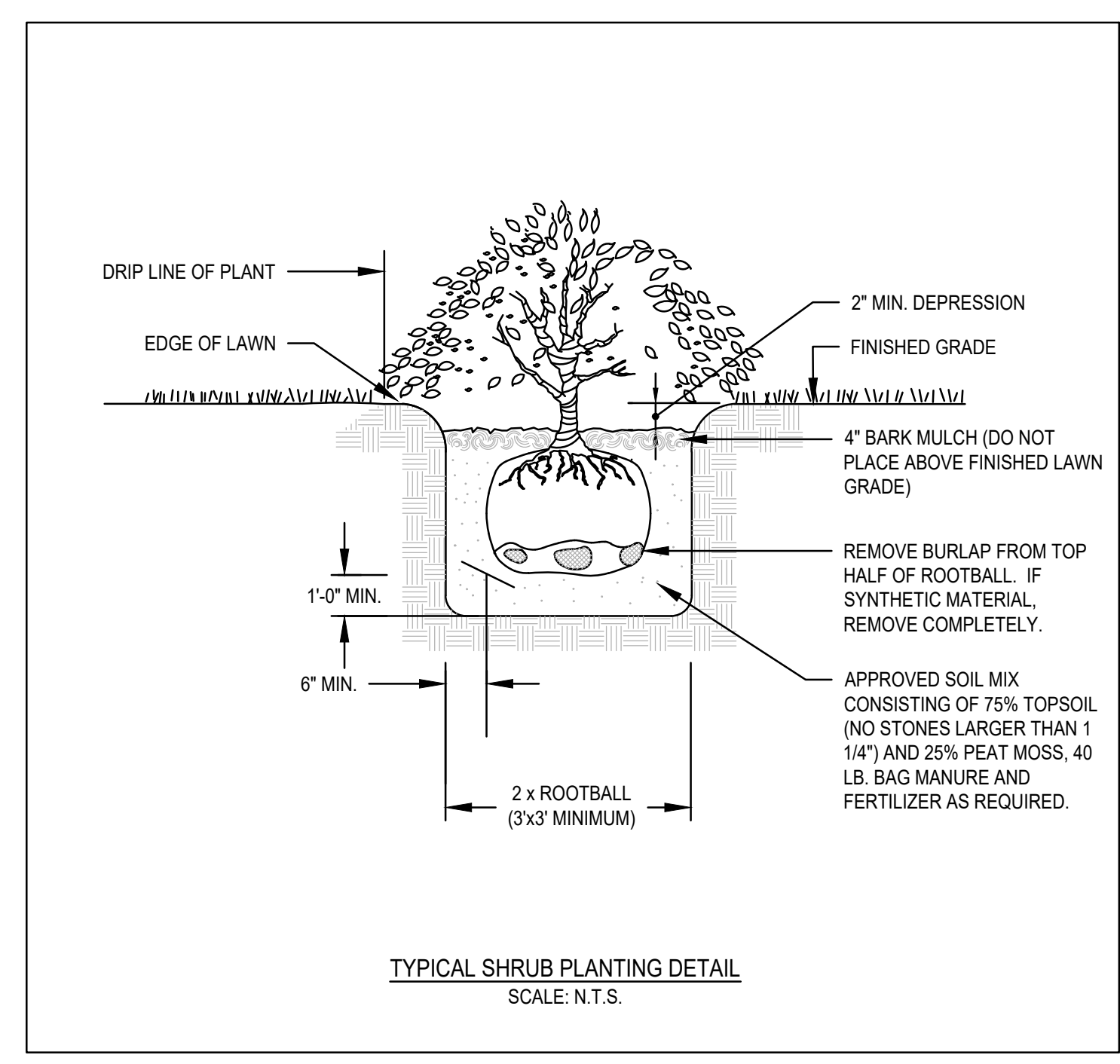
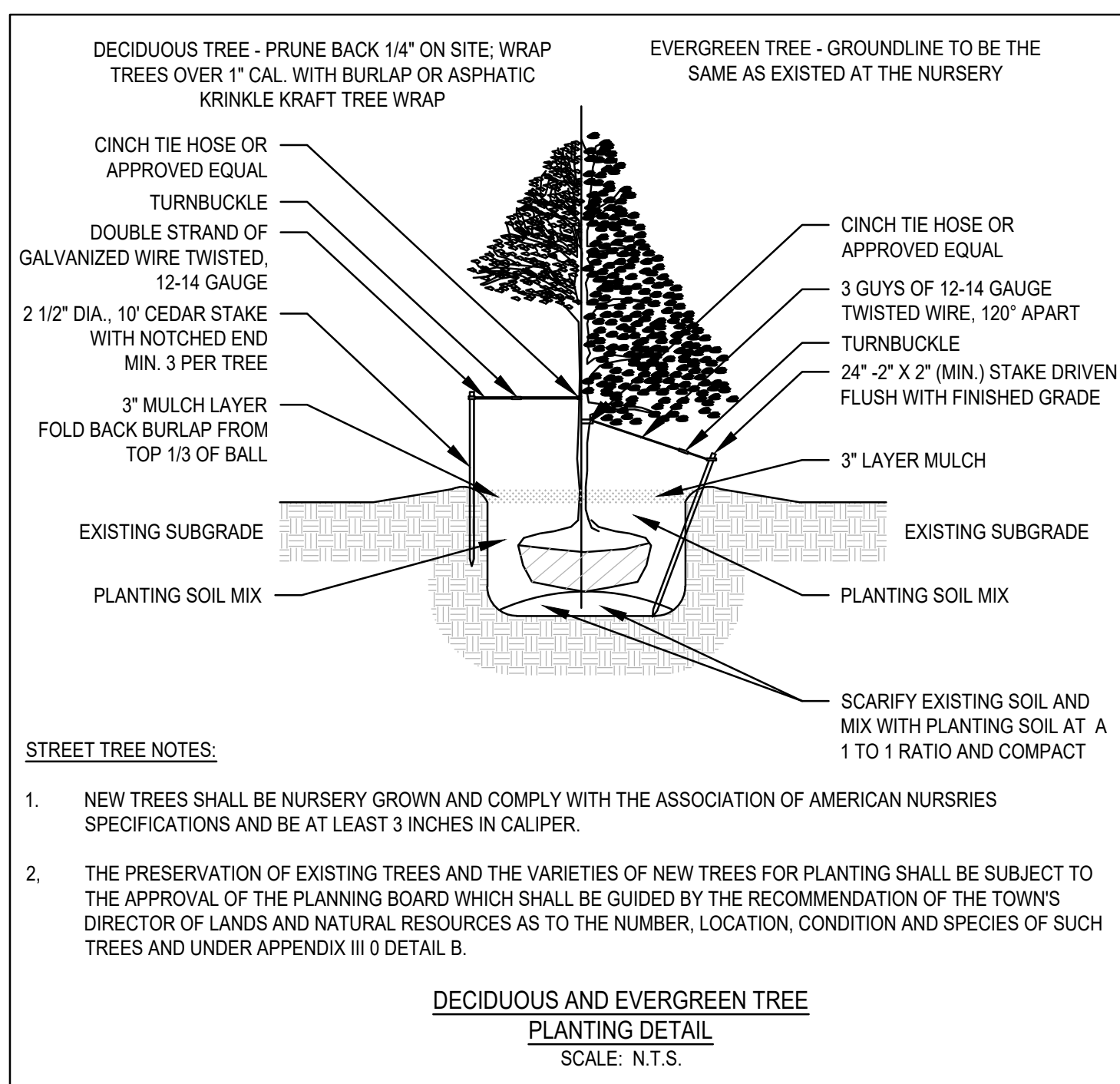
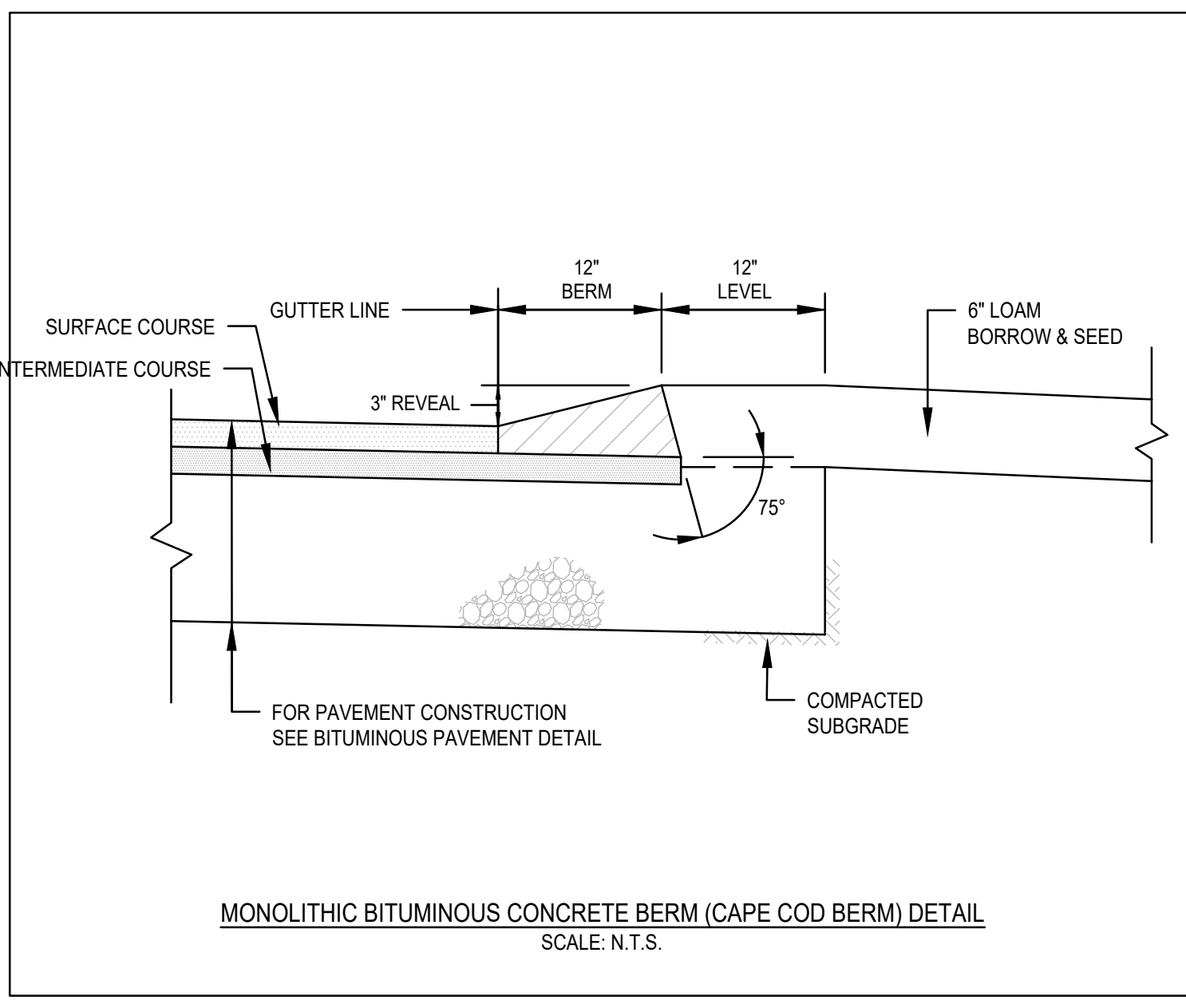
BRADLEY C. MCKENZIE
No. 38917
REGISTERED PROFESSIONAL ENGINEER
STATE OF MASSACHUSETTS

OWNERS/APPLICANT:
WALL STREET DEVELOPMENT CORP.
2 WARTHIN CIRCLE
NORWOOD, MASSACHUSETTS 02062

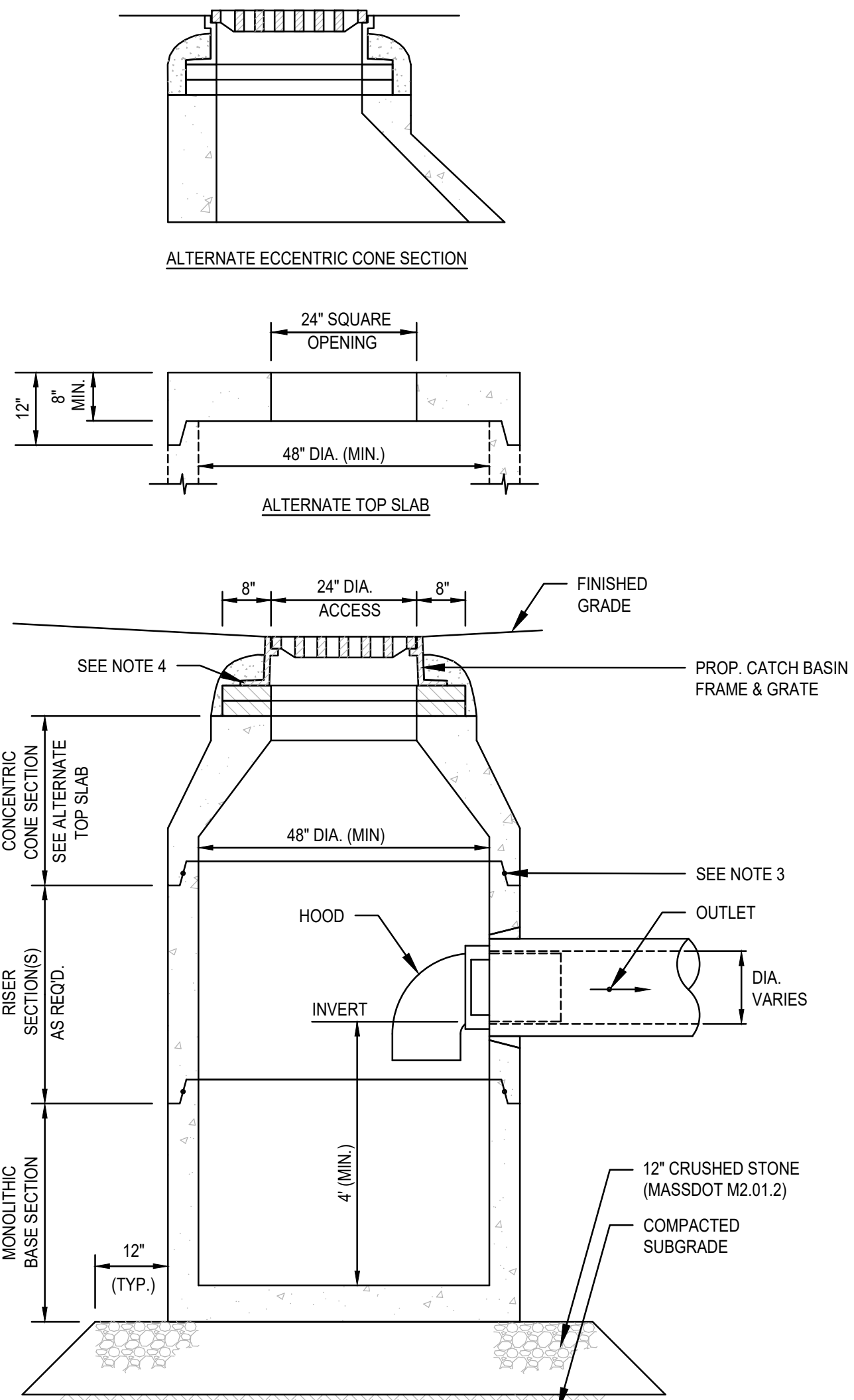
PERMIT PLAN SET

DRAWN BY:	ESS
DESIGNED BY:	ESS
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	OCTOBER 7, 2021
SCALE:	1"=20'
PROJECT NO.:	221-187
DWG. TITLE:	FIRE TRUCK TURNING PLAN

DWG. NO: **T-1**



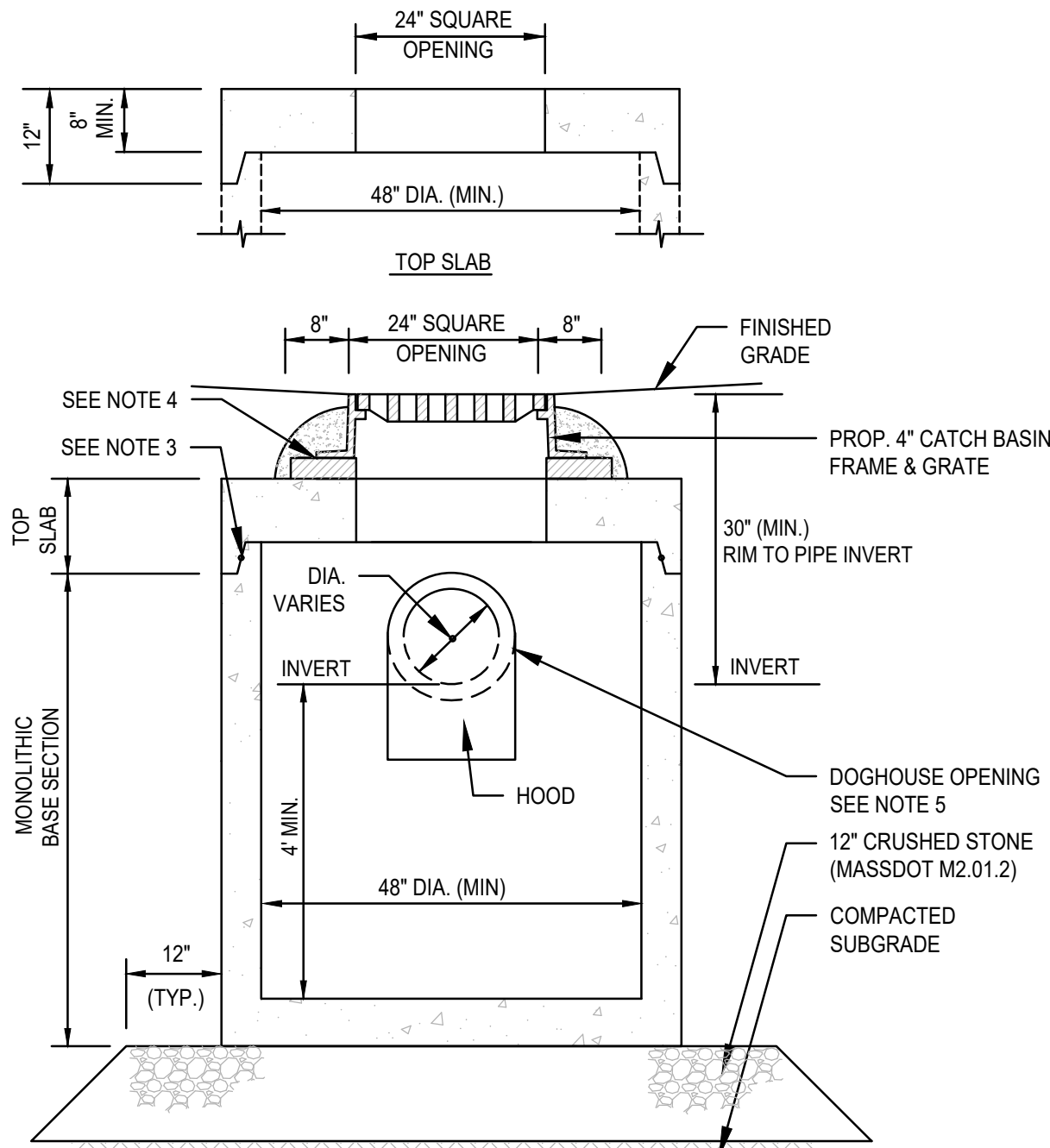
OWNERS/APPLICANT: WALL STREET DEVELOPMENT CORP. 2 WARTHIN CIRCLE NORWOOD, MASSACHUSETTS 02062		PERMIT PLAN SET	
DRAWN BY: ESS DESIGNED BY: ESS CHECKED BY: BCM APPROVED BY: BCM		DATE: OCTOBER 7, 2021 SCALE: AS NOTED PROJECT NO.: 221-187	
DWG. TITLE:		CONSTRUCTION DETAILS	
DWG. NO.:		D-1	



NOTES:

- ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
- PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
- MORTAR ALL PIPE CONNECTIONS. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
- CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM).

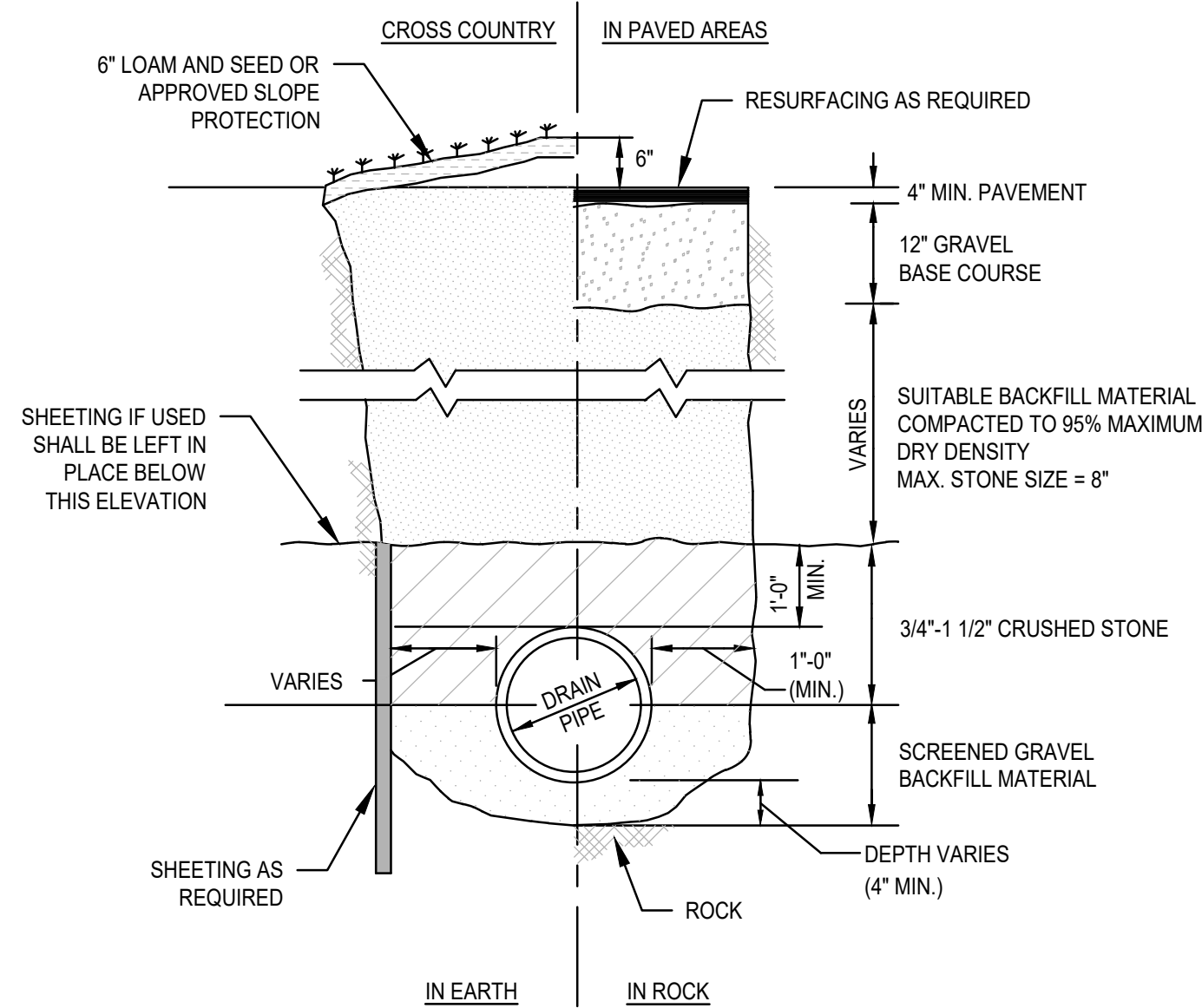
CATCH BASIN W/HOOD
SCALE: N.T.S.



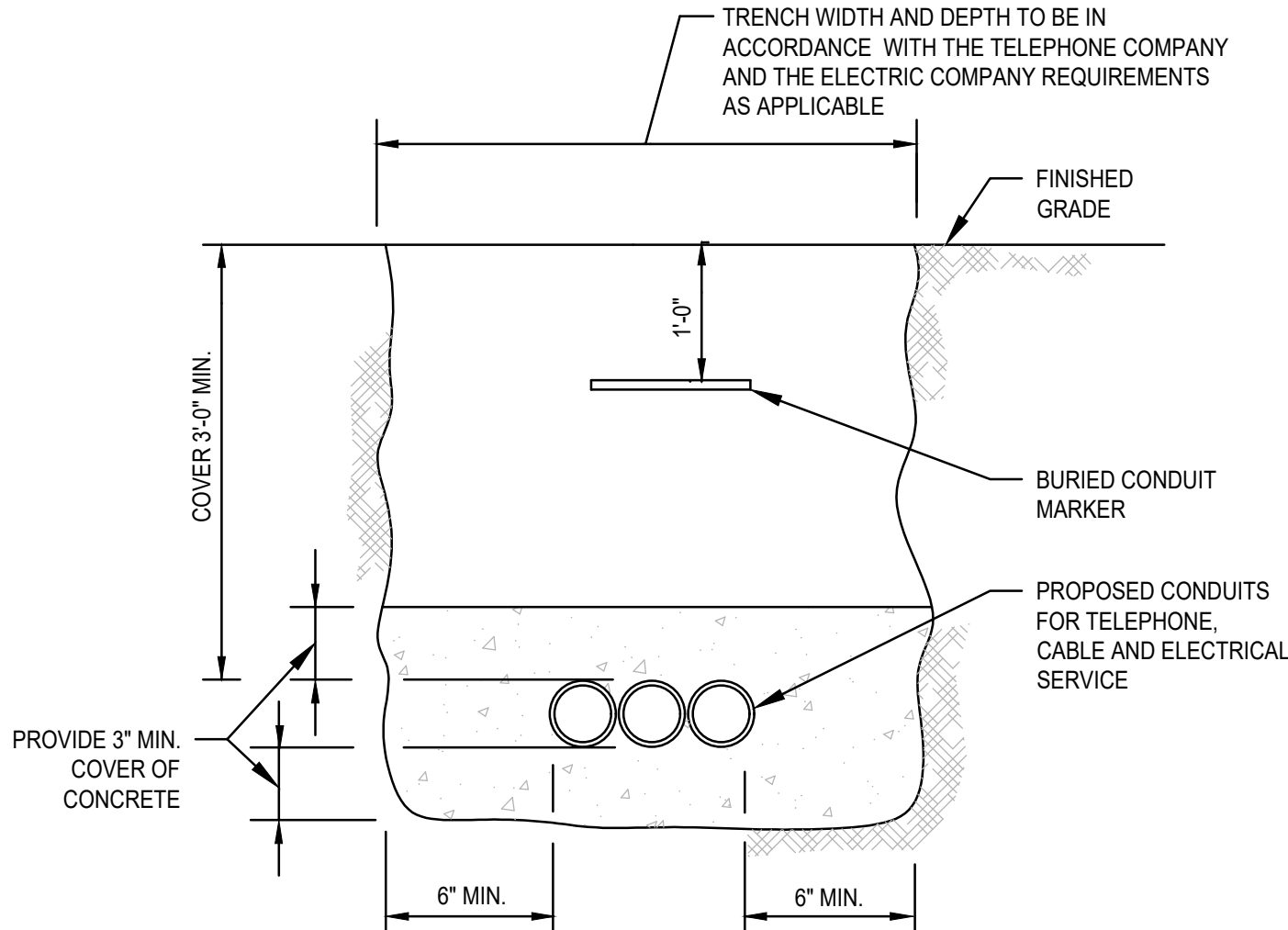
NOTES:

- ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
- PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
- MORTAR ALL PIPE CONNECTIONS. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
- CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM).
- PROVIDE DOG HOUSE OPENING FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. TOP SLAB SHOULD NOT REST DIRECTLY ON PIPE. MORTAR ALL PIPE CONNECTIONS.

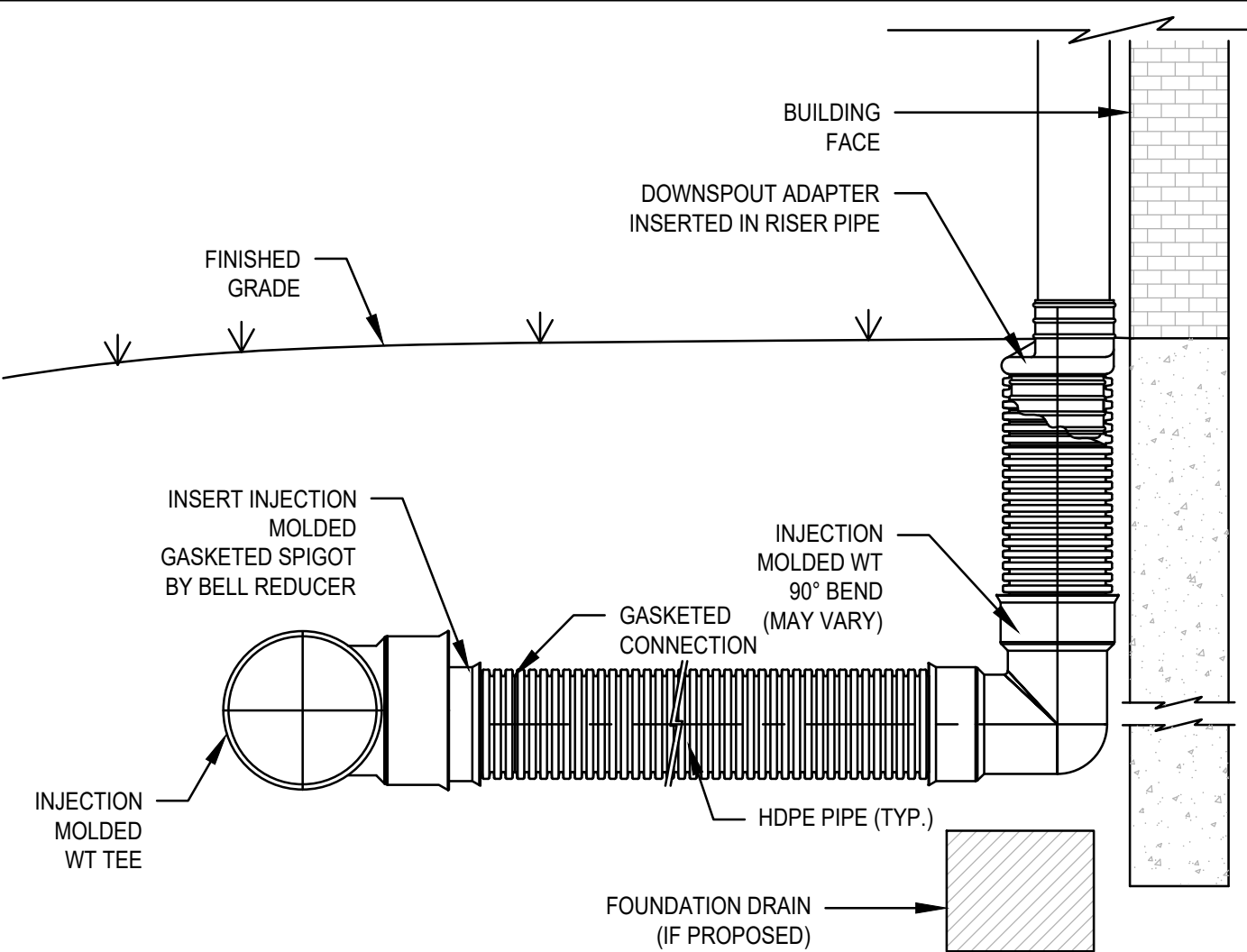
SHALLOW CATCH BASIN
SCALE: N.T.S.



TYPICAL DRAIN TRENCH DETAIL
SCALE: N.T.S.



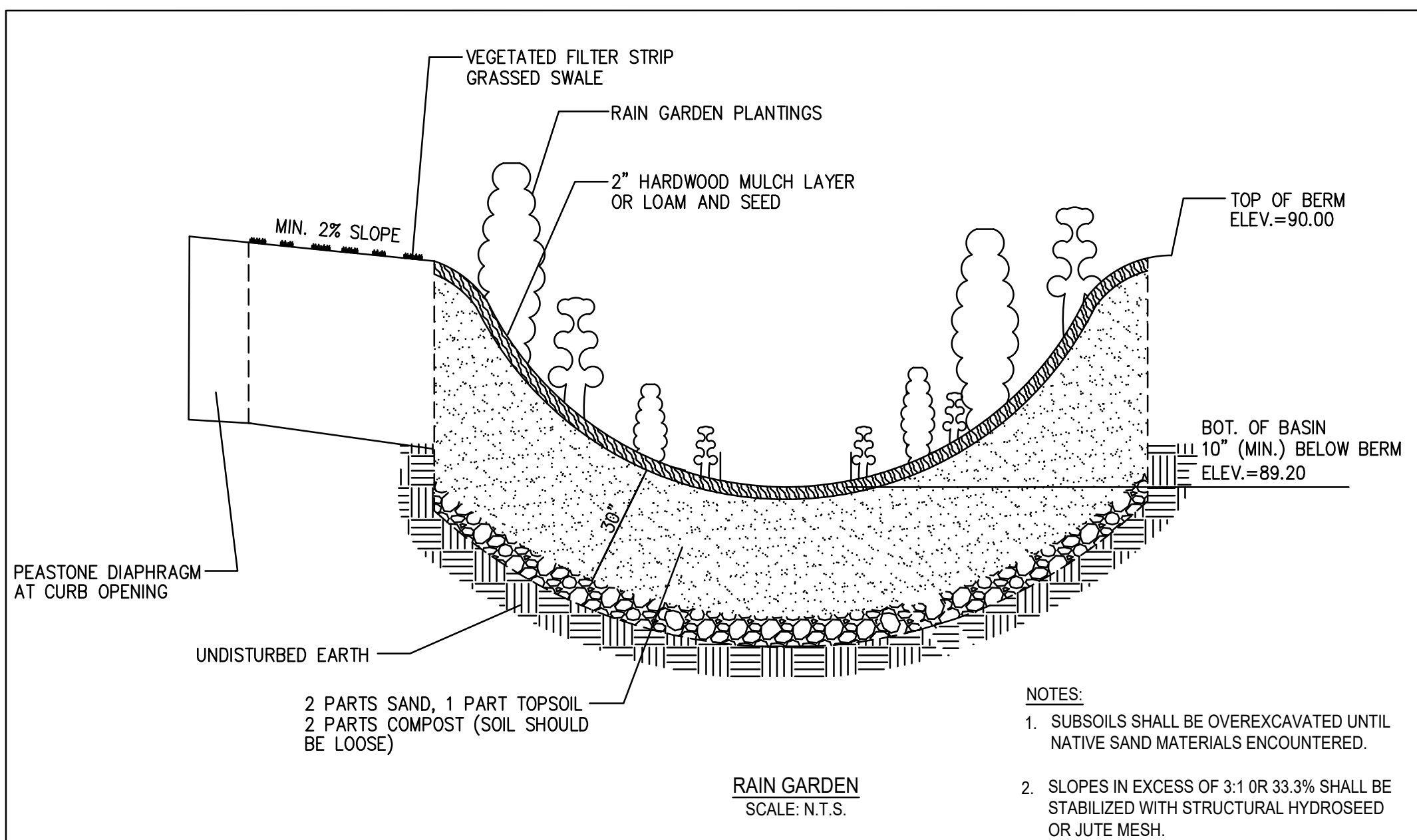
TYPICAL ELECTRIC/TELEPHONE/CABLE CONDUIT (US-UTILITY SERVICE)
SCALE: N.T.S.



NOTES:

- INJECTION MOLDED FITTING ARE AVAILABLE IN TEES, WYES, REDUCERS, 45° BENDS AND BELL/BELL COUPLERS.
- WATERTIGHT (WT) JOINTS SHOWN. SOIL-TIGHT (ST) FITTINGS ARE ALSO AVAILABLE.

ROOF LEADER CONNECTION DETAIL
SCALE: N.T.S.



NOTES:

- SUBSOILS SHALL BE OVEREXCAVATED UNTIL NATIVE SAND MATERIALS ENCOUNTERED.
- SLOPES IN EXCESS OF 3:1 OR 33.3% SHALL BE STABILIZED WITH STRUCTURAL HYDROSEED OR JUTE MESH.

RAIN GARDEN
SCALE: N.T.S.

Hydro
International
Stormwater Solutions
94 Hutchins Drive
Portland, Maine 04102
Tel: (207) 756-6200
Fax: (207) 756-6212
stormwaterinquiry@hydro-int.com

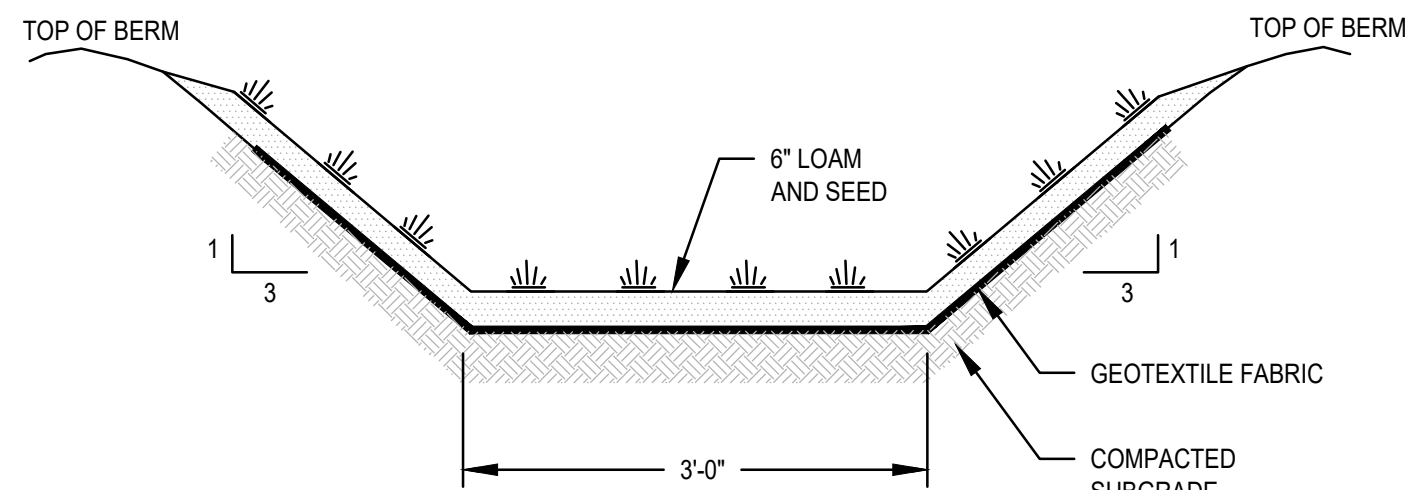
MANHOLE WALL AND SLAB THICKNESS ARE NOT TO SCALE.

CONTACT HYDRO INTERNATIONAL FOR A BOTTOM OF STRUCTURE ELEVATION PRIOR TO SETTING FIRST DEFENSE MANHOLE.

CONTRACTOR TO CONFIRM RIM, PIPE INVERTS, PIPE DIA. AND PIPE ORIENTATION PRIOR TO RELEASING UNIT TO FABRICATION.

Parts List			
ITEM	QTY.	DESCRIPTION	SIZE (in)
1	2	I.D. CONCRETE MANHOLE	48
2	2	INLET CHUTE (W/ FLOATABLES TRAP)	
3	2	OUTLET CHUTE	
4	2	INLET PIPE (BY OTHERS)	12
5	2	OUTLET PIPE (BY OTHERS)	12
6	2	HIGH FLOW BYPASS	
7	2	FRAME AND COVER (OR GRATE)	

4" DIAMETER FIRST DEFENSE UNIT (4D-4HC)
SCALE: N.T.S.



GRASSED SWALE DETAIL
SCALE: N.T.S.

REV	DATE	DESCRIPTION	BY	APP
1	11/30/21	DRAINAGE & UTILITIES	ESS	BCM

MG
MCKENZIE
ENGINEERING GROUP
Assinippi Office Park
150 Longwater Drive, Suite 101
Norwell, MA 02061
P: 781.792.3900
F: 781.792.0333
www.mckeng.com

SITE DEVELOPMENT PLANS
(ASSESSOR'S MAP 57, PARCEL 70)
320 CONCORD STREET
ROCKLAND, MASSACHUSETTS

PROFESSIONAL ENGINEER:



OWNERS/APPLICANT:
WALL STREET DEVELOPMENT
CORP.
2 WARTHIN CIRCLE
NORWOOD, MASSACHUSETTS 02062

DRAWN BY:	ESS
DESIGNED BY:	ESS
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	OCTOBER 7, 2021
SCALE:	AS NOTED
PROJECT NO.:	221-187
DWG. TITLE:	

CONSTRUCTION
DETAILS

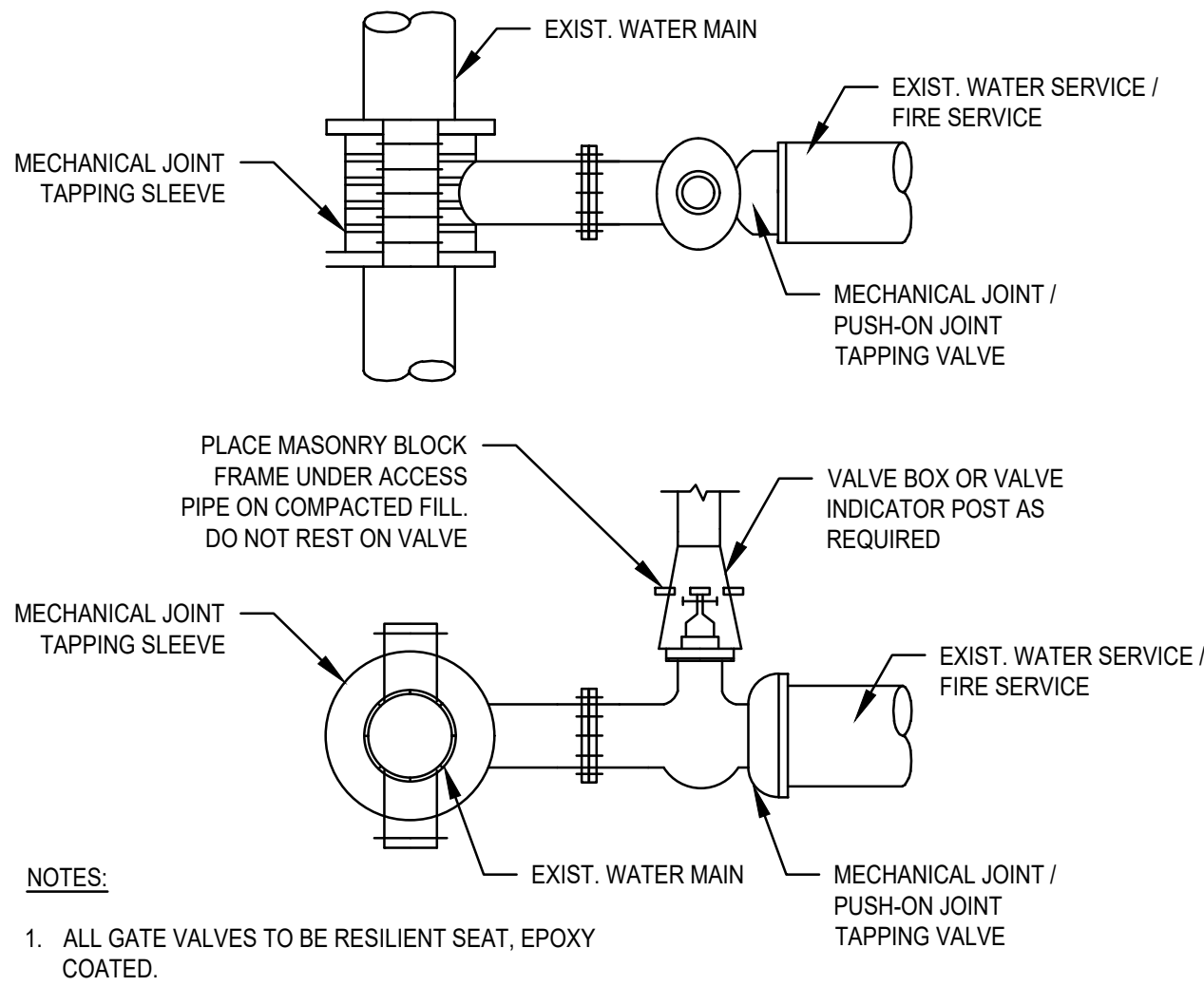
DWG. NO:

D-2

PERMIT PLAN SET

GENERAL NOTES

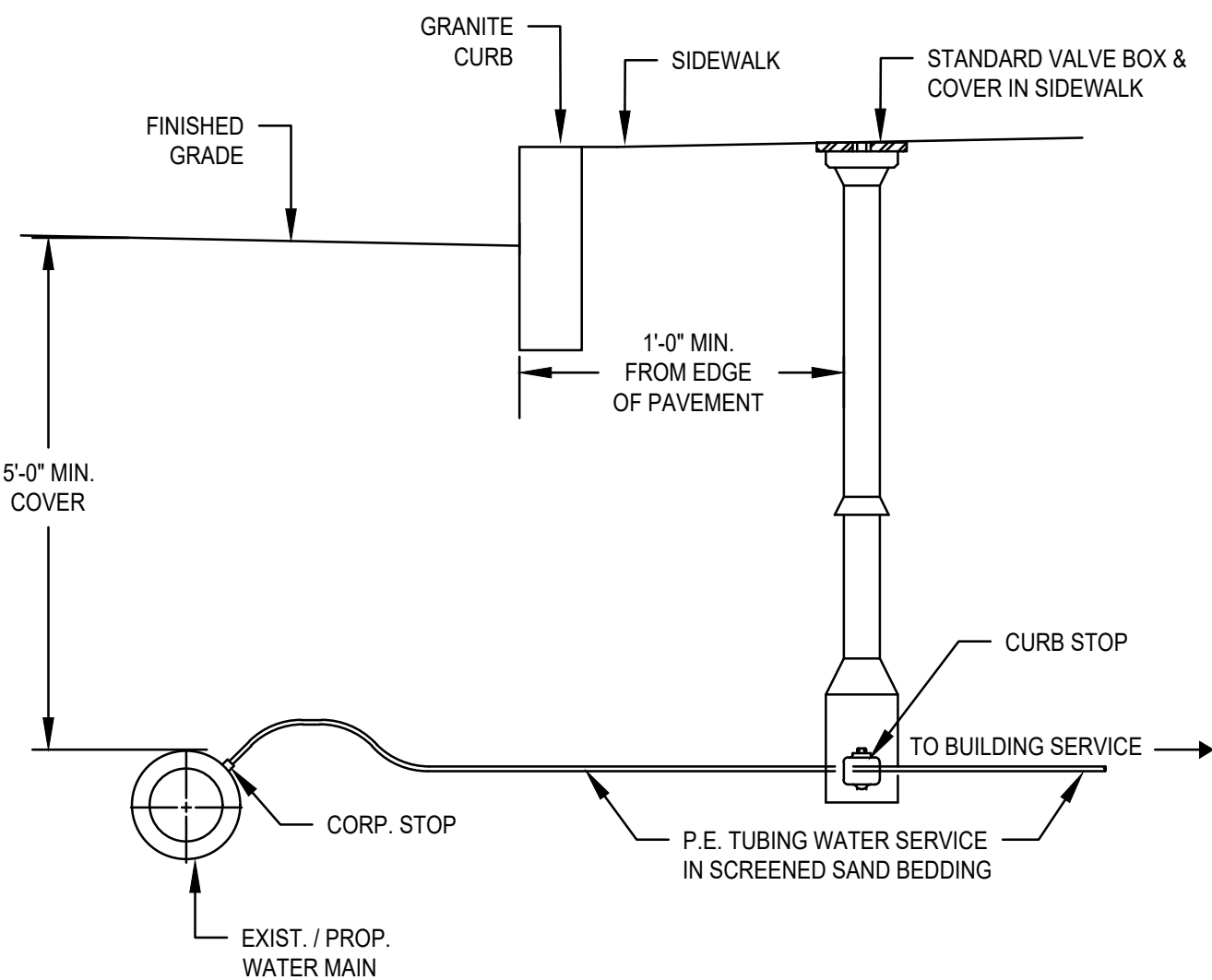
- IF SHEETING IS USED, IT SHALL BE CUT OFF NO MORE THAN 12" ABOVE TOP OF PIPE.
- ALL PIPES SHALL BE PRESSURE TESTED AT 200 PSI WORKING PRESSURE FOR A MINIMUM DURATION OF TWO HOUR.
- WATER SYSTEM IS TO BE DISINFECTED TO 50 P.P.M. AVAILABLE CHLORINE AND AFTER 24 HOURS TO 25 P.P.M. OR AS REQUIRED BY ABINGTON ROCKLAND WATER SUPERINTENDENT/ENGINEER.
- WATER PIPE IS TO BE CEMENT LINED DUCTILE IRON "TYTON" OR EQUAL TYPE JOINT. CONFORMING TO A.N.S.I./A.W.W.A. C150/A21.50, CLASS 52, AS APPROVED BY THE TOWN'S WATER SUPERINTENDENT/ENGINEER.
- ALL PIPING SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH A.W.W.A. STANDARDS PRIOR TO PAVING IF PAVING ABOVE TRENCH IS REQUIRED.
- BACKFILL IS TO BE COMPACTED TO 90% MAXIMUM DRY DENSITY BY AASHTO T-180 D.
- ALL WATER PIPE SHALL BE LAID WITH A MINIMUM OF 5 FEET OF COVER OF APPROVED MATERIALS.
- RESULTS FROM PRESSURE TESTING AND DISINFECTION SHALL BE FURNISHED TO THE DIRECTOR OF PUBLIC WORKS FOR APPROVAL PRIOR TO WATER BEING TURNED ON.
- ALL WORK SHALL BE IN CONFORMANCE WITH ABINGTON ROCKLAND JOINT WATER WORKS STANDARDS.
- ALL PERMITS REQUIRED FOR STREET OPENINGS AND WATER MAIN TAPPING MUST BE OBTAINED.
- NO WATER WILL BE TURNED ON IN THE PROJECT WITHOUT ABINGTON ROCKLAND JOINT WATER WORKS APPROVAL.



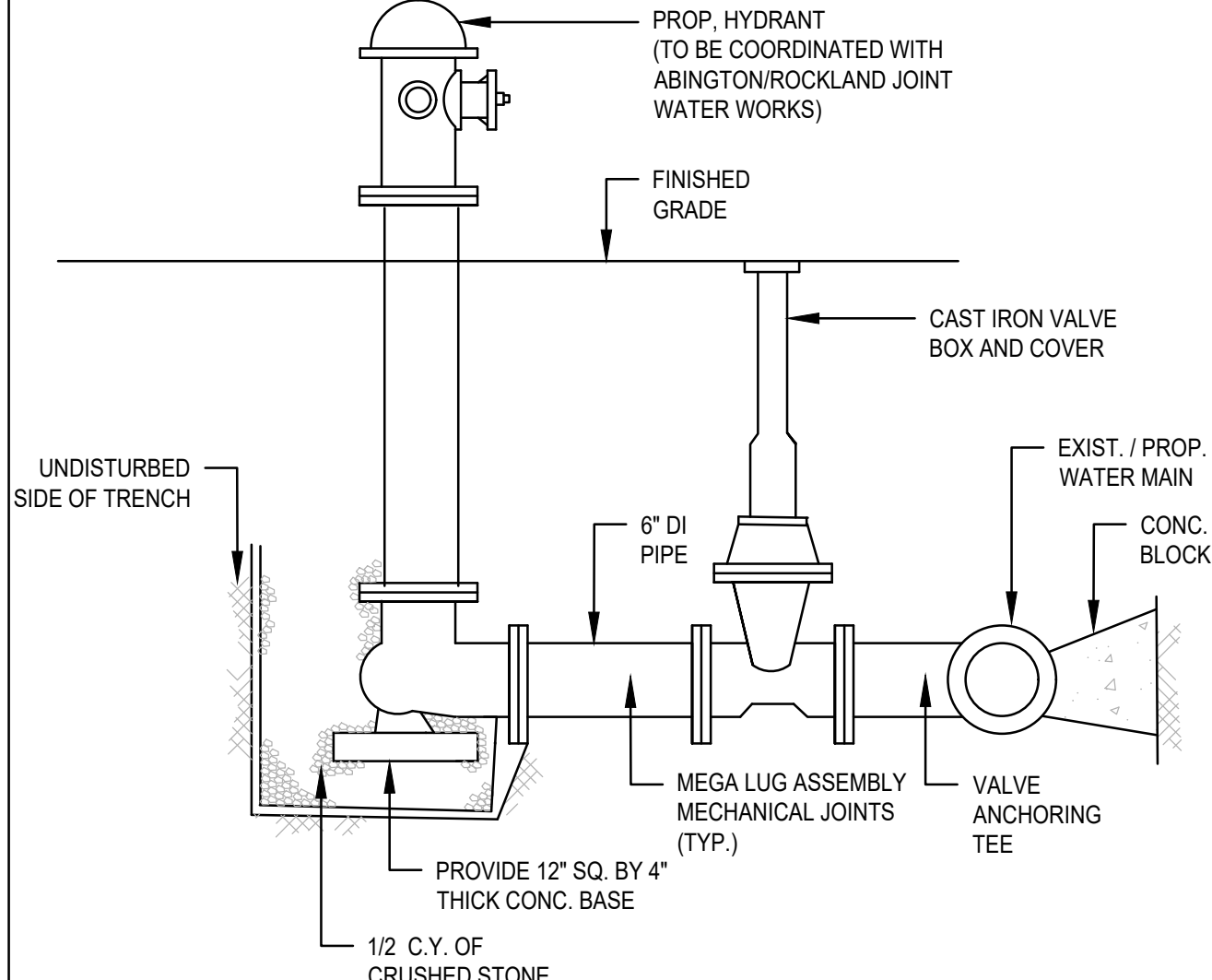
NOTES:

- ALL GATE VALVES TO BE RESILIENT SEAT, EPOXY COATED.

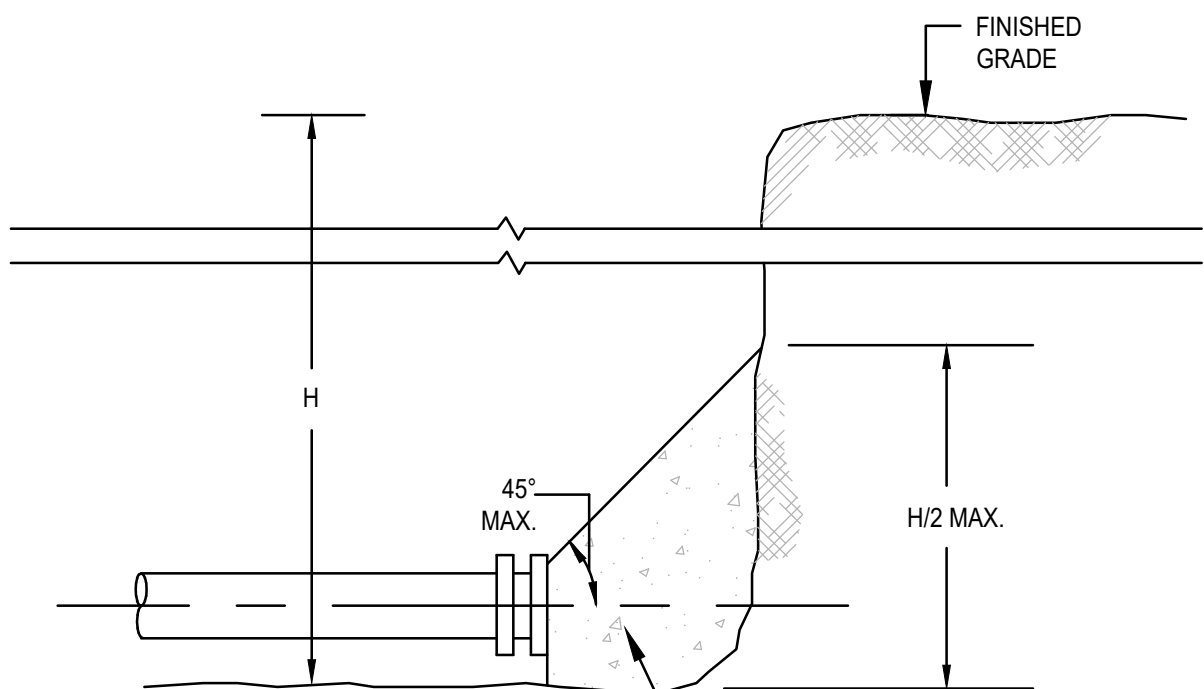
TYPICAL TAPPING SLEEVE AND VALVE DETAIL
SCALE: N.T.S.



SERVICE CONNECTION DETAIL
SCALE: N.T.S.

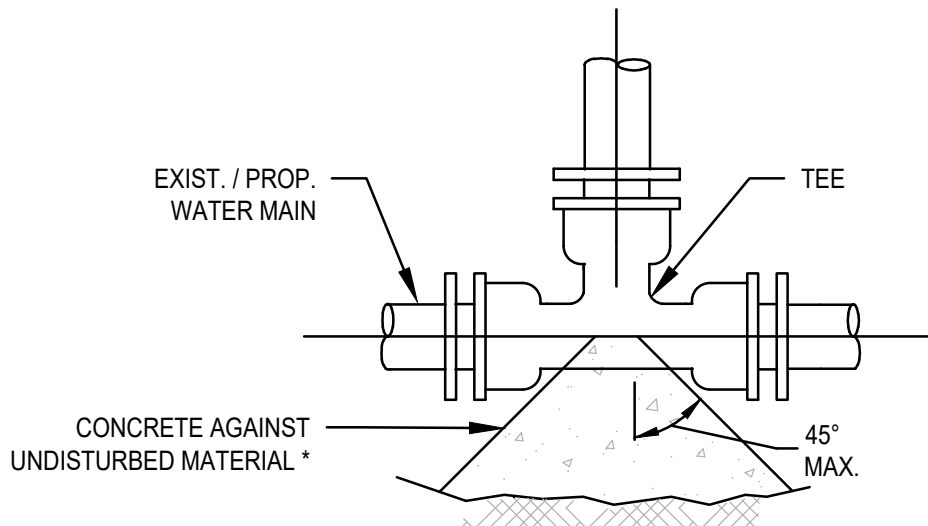


HYDRANT DETAIL
SCALE: N.T.S.



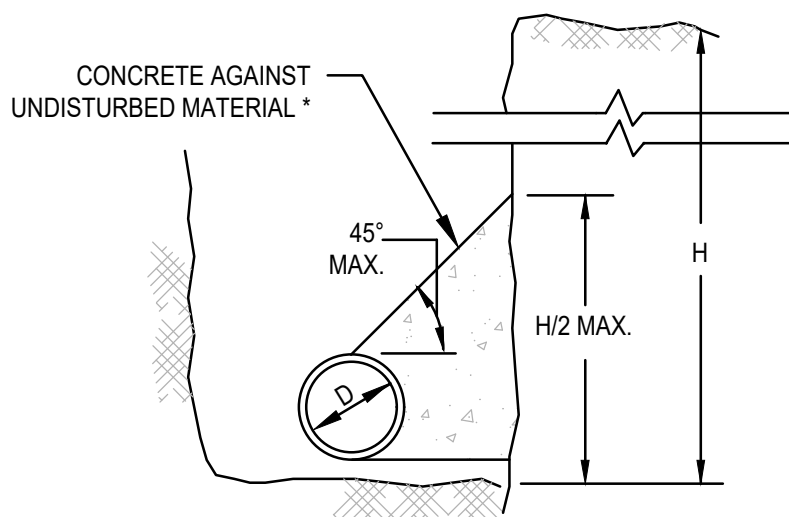
* SEE TABLE ON THRUST BLOCK BEARING AREAS FOR THE AREA OF CONCRETE REQUIRED

THRUST WATER MAIN PLUG
SCALE: N.T.S.

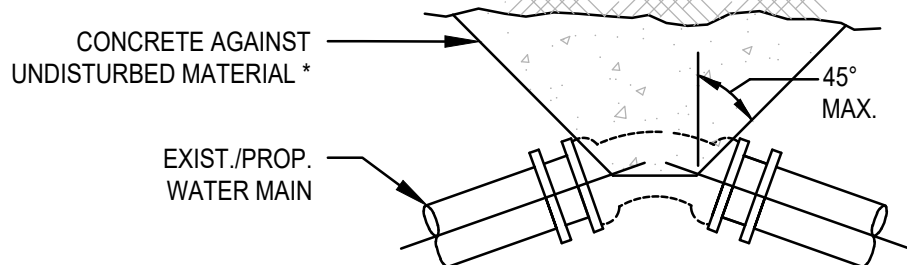


* SEE TABLE ON THRUST BLOCK BEARING AREAS FOR THE AREA OF CONCRETE REQUIRED

TYPICAL WATER MAIN TEE THRUST BLOCK DETAIL
SCALE: N.T.S.

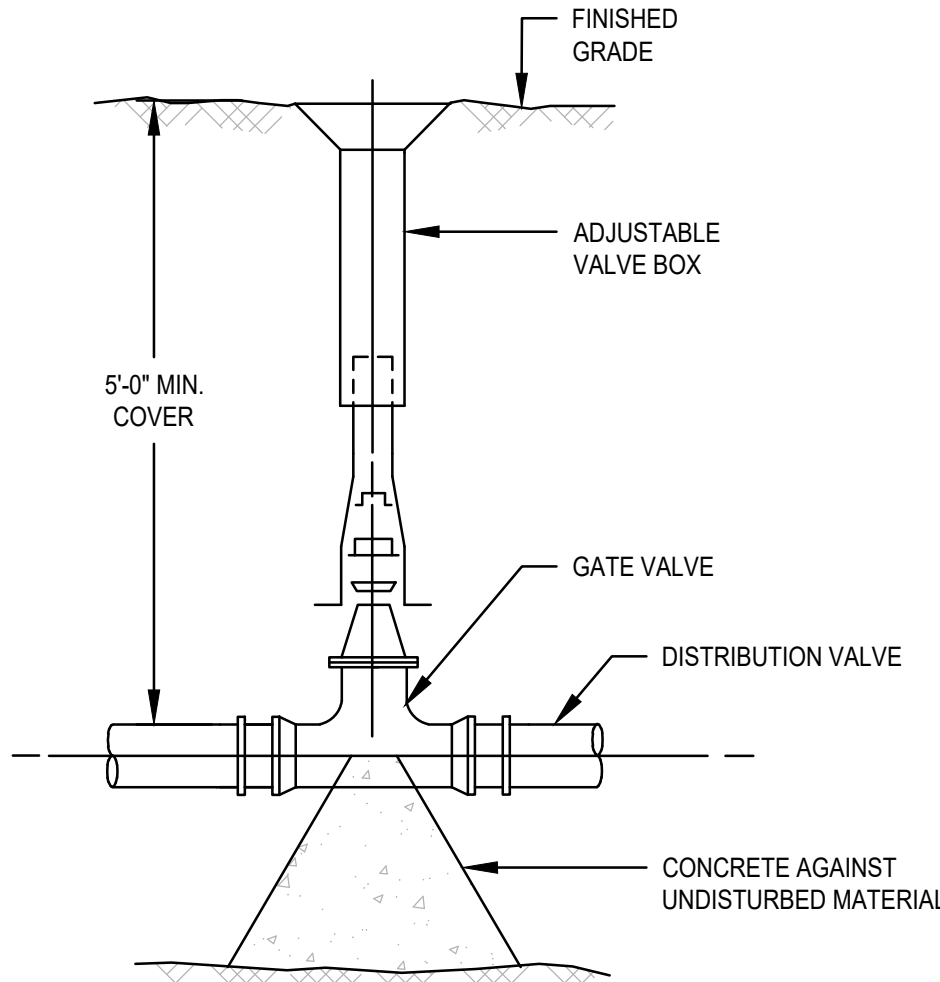


THRUST WATER MAIN THRUST BLOCK SECTION DETAIL
SCALE: N.T.S.



* SEE TABLE ON THRUST BLOCK BEARING AREAS FOR THE AREA OF CONCRETE REQUIRED

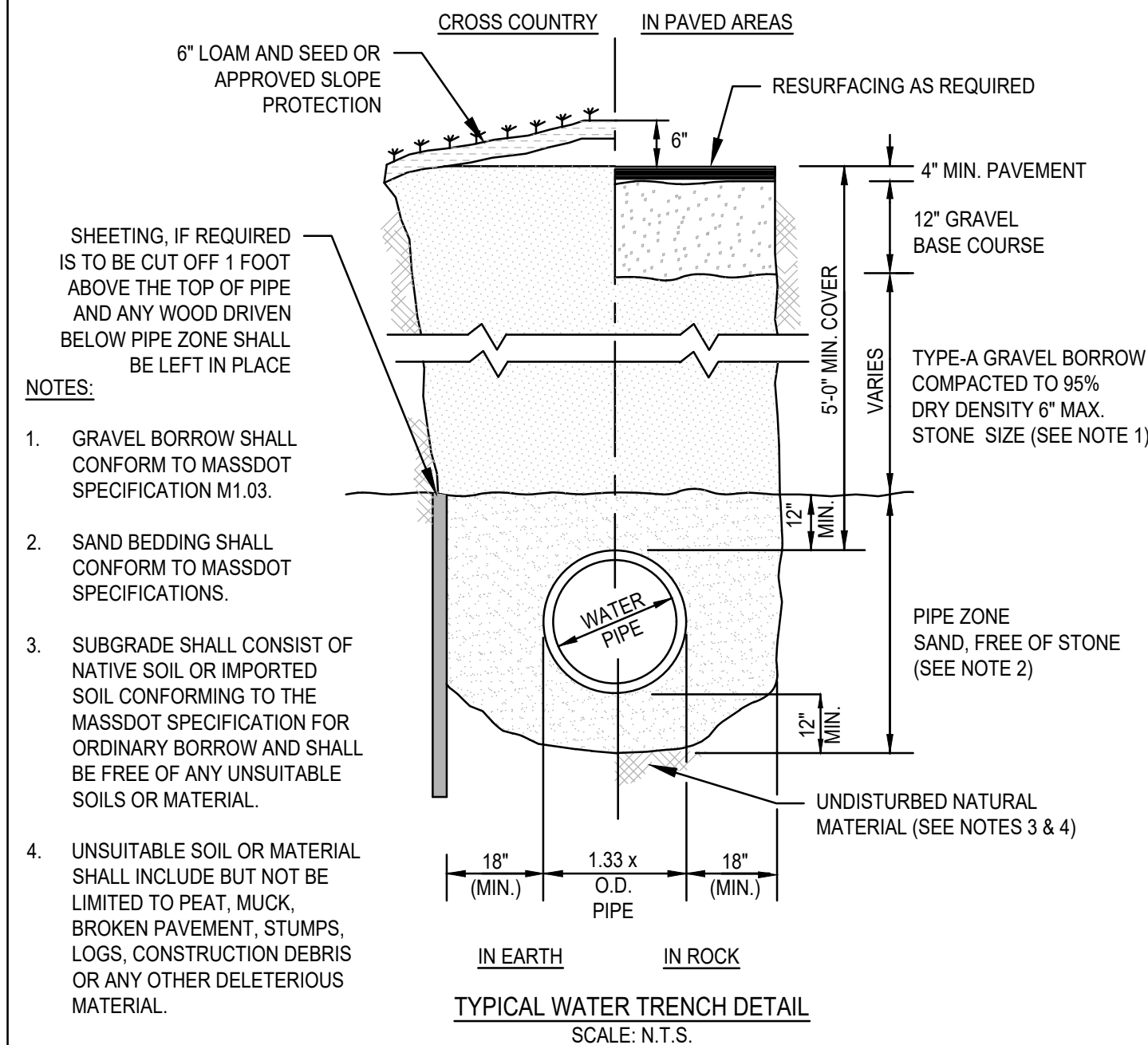
THRUST WATER MAIN BEND THRUST BLOCK DETAIL
SCALE: N.T.S.



NOTES:

- VALVES SHALL OPEN TO THE RIGHT.

WATER GATE DETAIL
SCALE: N.T.S.



NOTES:

- GRAVEL BORROW SHALL CONFORM TO MASSDOT SPECIFICATION M1.03.
- SAND BEDDING SHALL CONFORM TO MASSDOT SPECIFICATIONS.
- SUBGRADE SHALL CONSIST OF NATIVE SOIL OR IMPORTED SOIL CONFORMING TO THE MASSDOT SPECIFICATION FOR ORDINARY BORROW AND SHALL BE FREE OF ANY UNSUITABLE SOILS OR MATERIAL.
- UNSUITABLE SOIL OR MATERIAL SHALL INCLUDE BUT NOT BE LIMITED TO PEAT, MUCK, BROKEN PAVEMENT, STUMPS, LOGS, CONSTRUCTION DEBRIS OR ANY OTHER DELETERIOUS MATERIAL.

REV	DATE	DESCRIPTION	BY	APP
1	11/30/21	DRAINAGE & UTILITIES	ESS	BCM



SITE DEVELOPMENT PLANS
(ASSESSOR'S MAP 57, PARCEL 70)
320 CONCORD STREET
ROCKLAND, MASSACHUSETTS

PROFESSIONAL ENGINEER:



OWNERS/APPLICANT:
WALL STREET DEVELOPMENT
CORP.
2 WARTHIN CIRCLE
NORWOOD, MASSACHUSETTS 02062

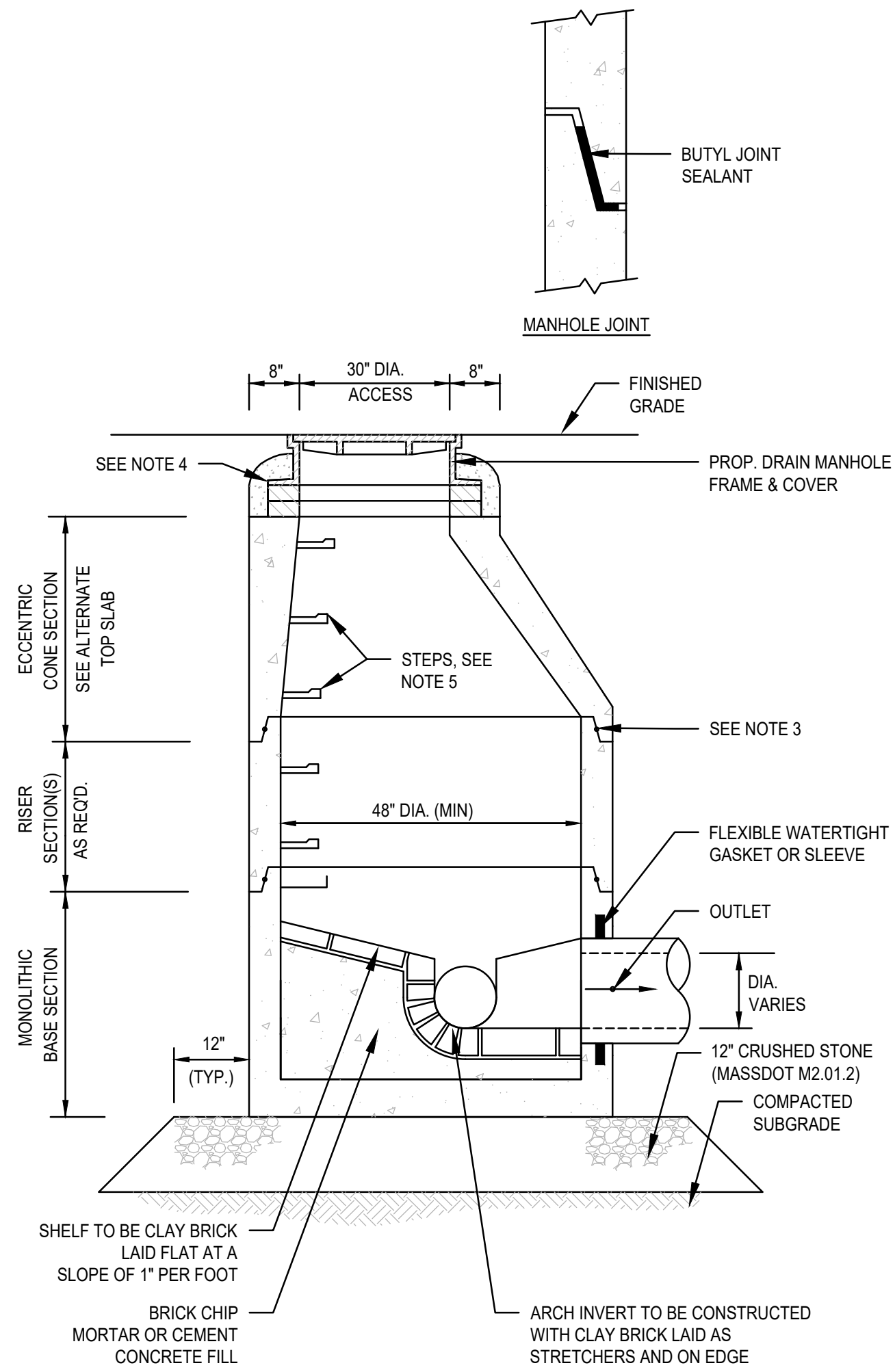
PERMIT PLAN SET

DRAWN BY:	ESS
DESIGNED BY:	ESS
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	OCTOBER 7, 2021
SCALE:	AS NOTED
PROJECT NO.:	221-187
DWG. TITLE:	

CONSTRUCTION
DETAILS

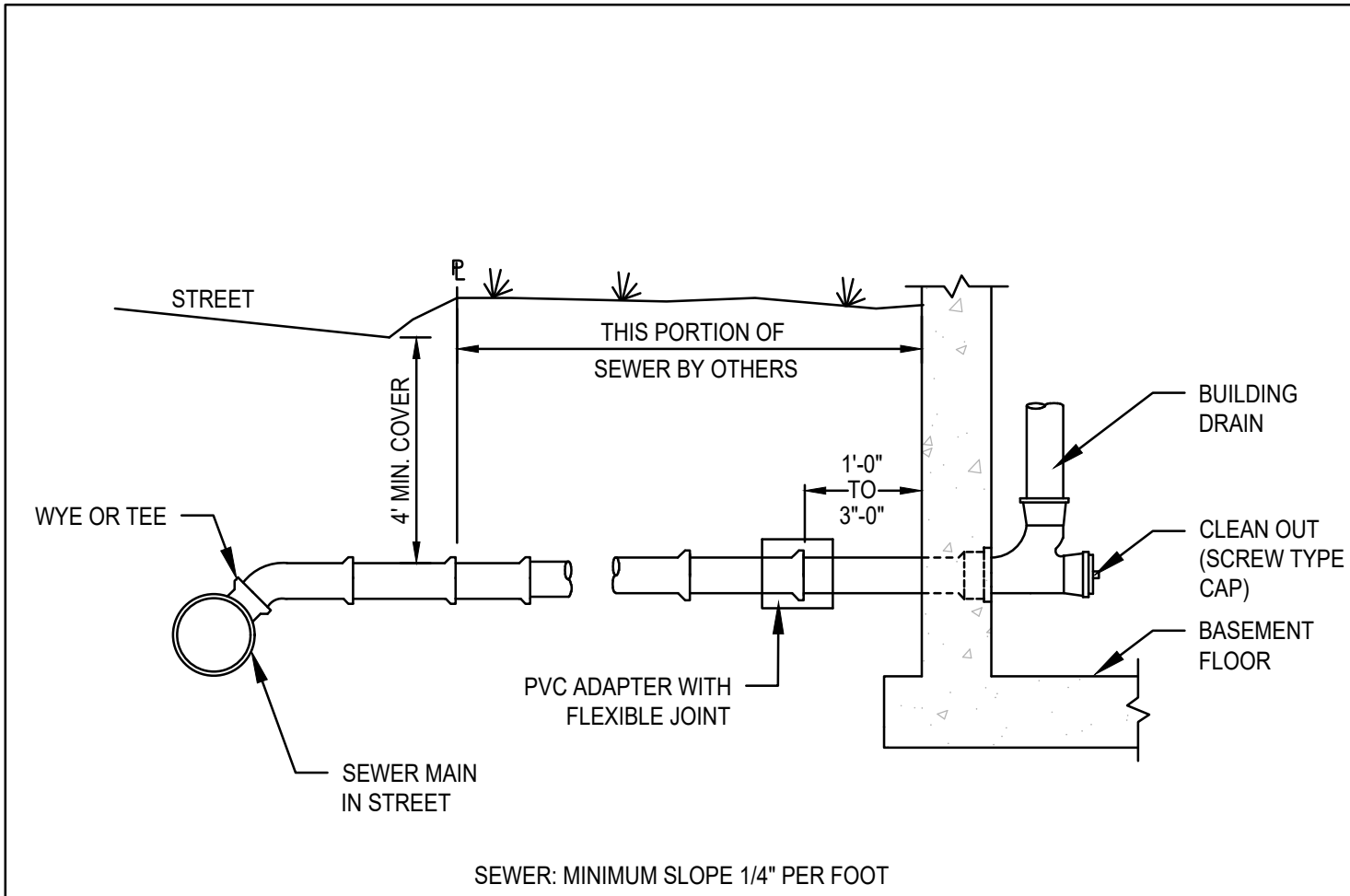
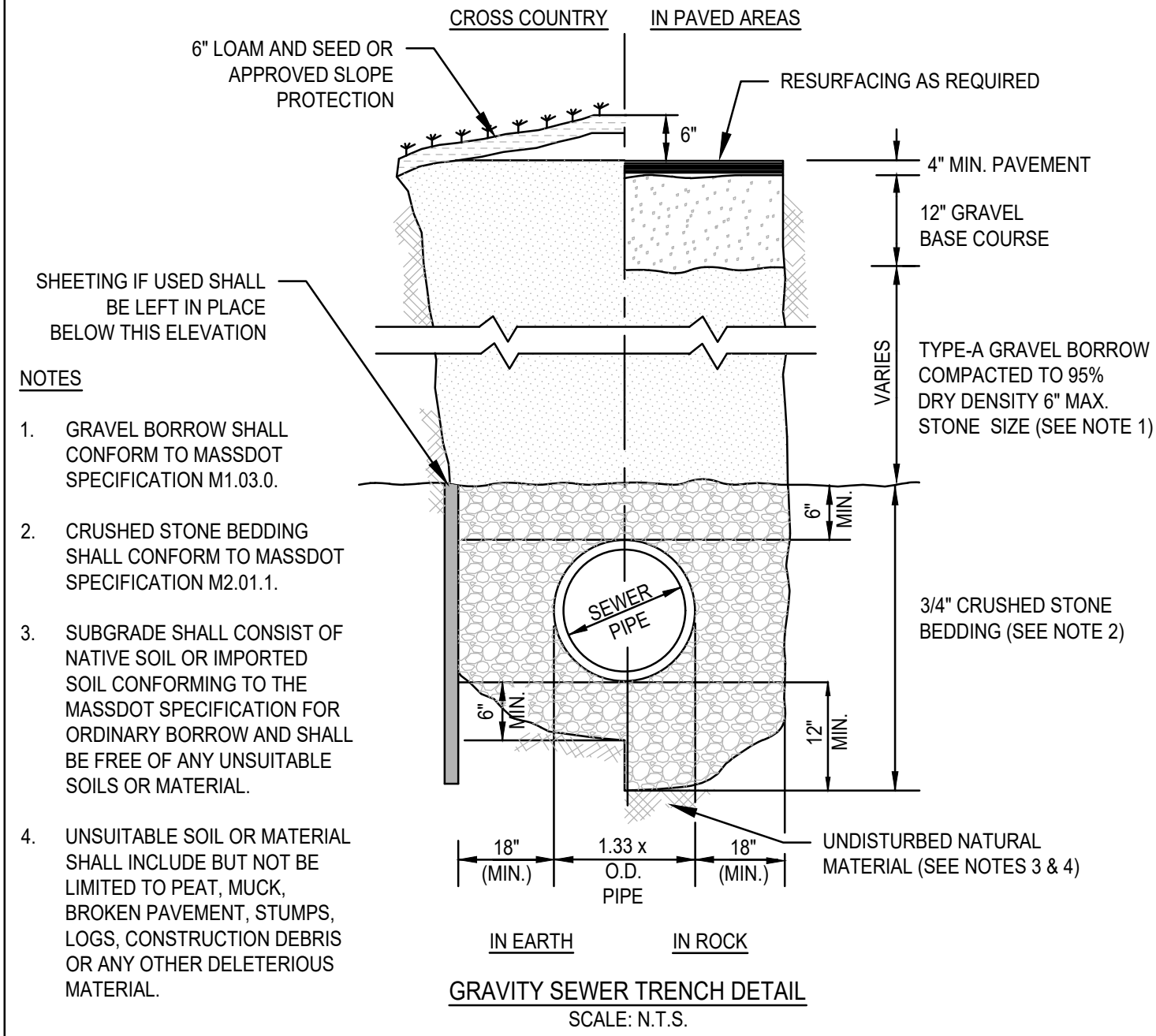
DWG. NO:

D-3

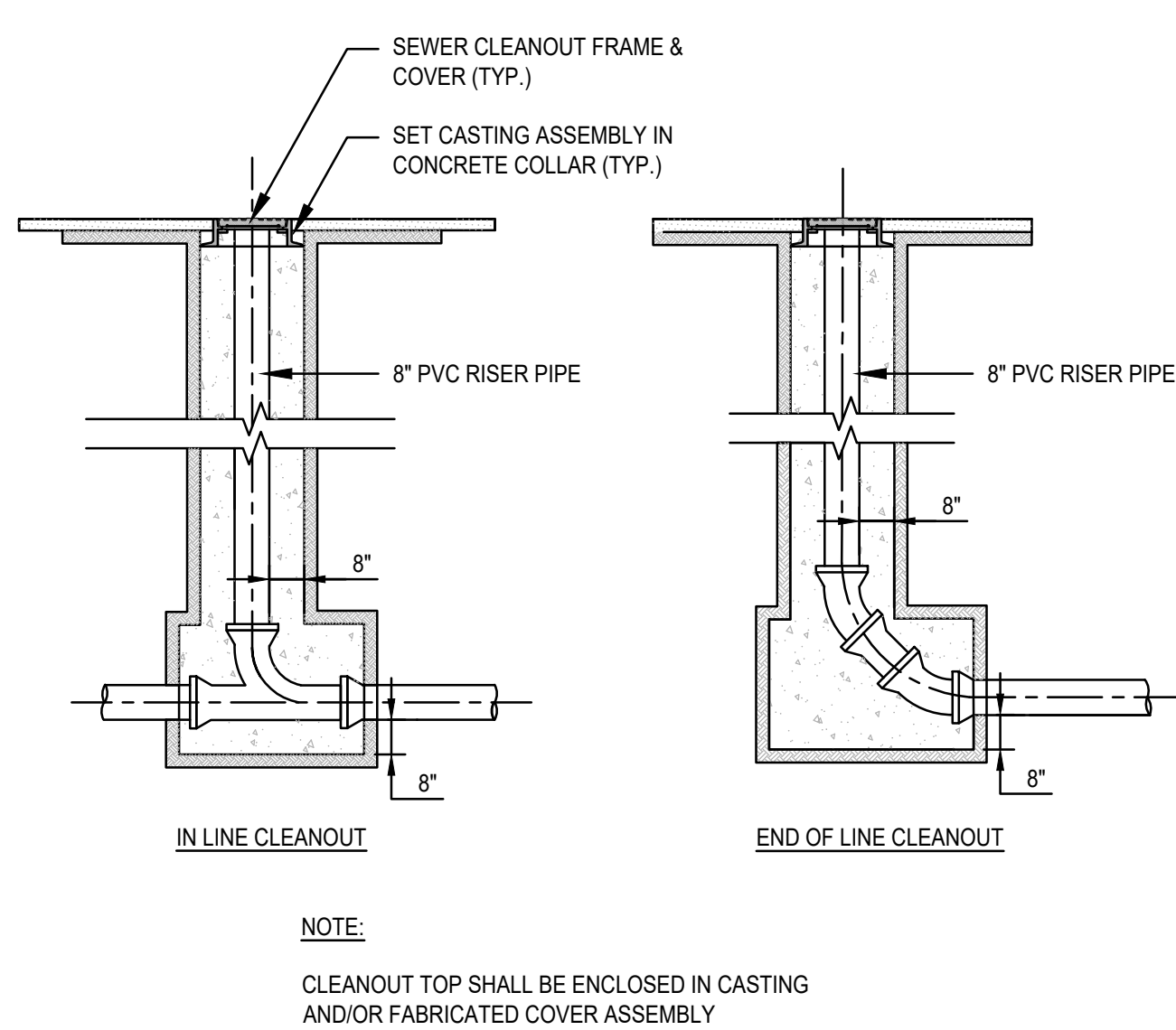


- NOTES:
- ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
 - PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
 - ALL EXTERIOR SURFACES SHALL BE GIVEN TWO COATS OF BITUMINOUS WATER-PROOFING MATERIAL. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PERFORMED BUTYL RUBBER.
 - SEWER MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM).
 - COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.

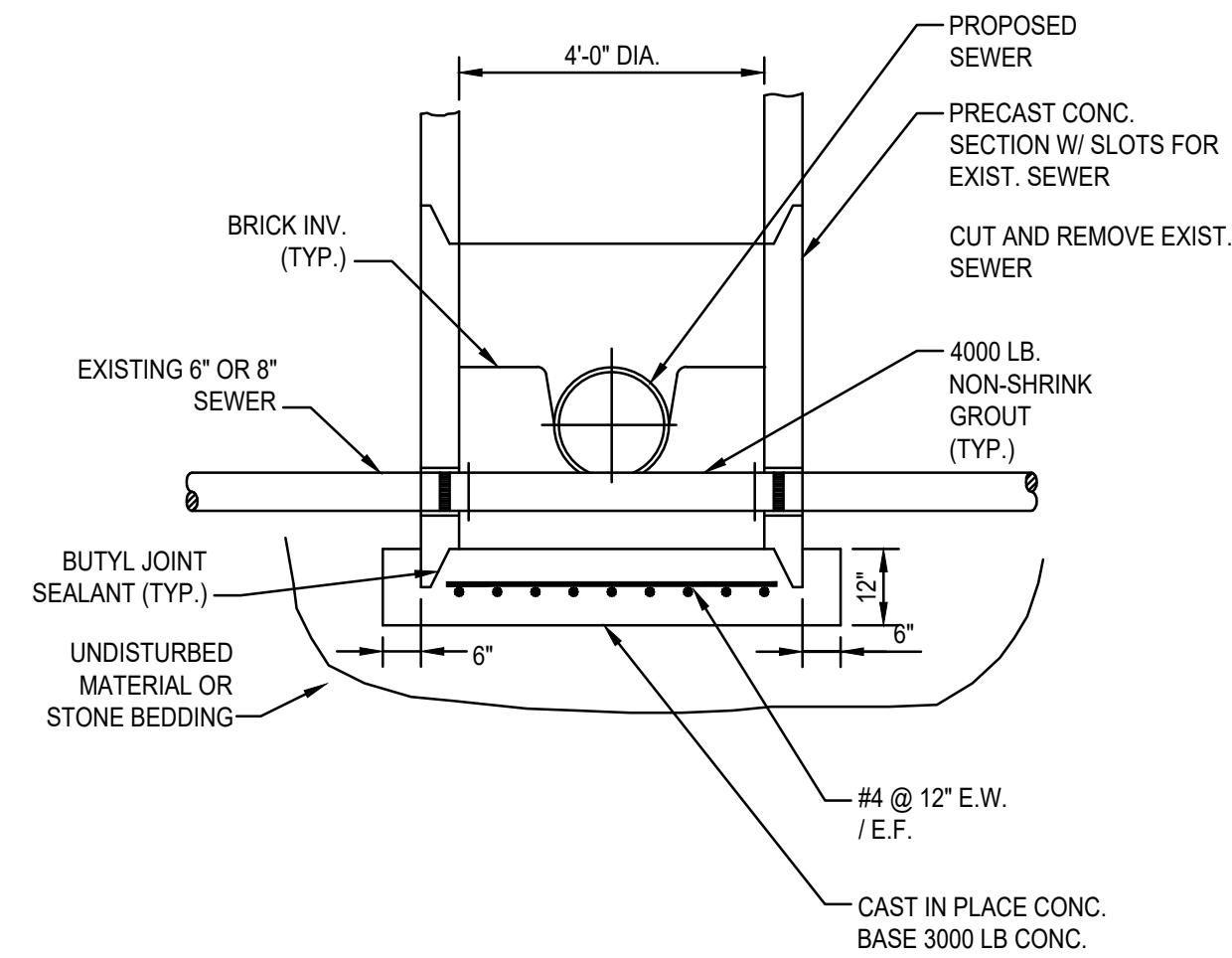
TYPICAL SEWER MANHOLE
SCALE: N.T.S.



TYPICAL BUILDING SEWER SERVICE
SCALE: N.T.S.



CLEANOUT DETAIL
SCALE: N.T.S.



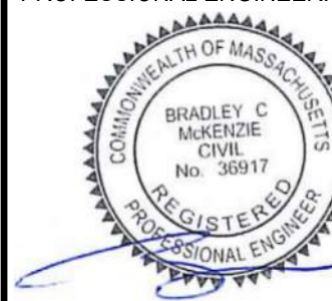
TYPICAL DOGHOUSE MANHOLE
SCALE: N.T.S.

REV	DATE	DESCRIPTION	BY	APP
1	11/30/21	DRAINAGE & UTILITIES	ESS	BCM



SITE DEVELOPMENT PLANS
(ASSESSOR'S MAP 57, PARCEL 70)
320 CONCORD STREET
ROCKLAND, MASSACHUSETTS

PROFESSIONAL ENGINEER:



OWNERS/APPLICANT:
WALL STREET DEVELOPMENT
CORP.
2 WARTHIN CIRCLE
NORWOOD, MASSACHUSETTS 02062

PERMIT PLAN SET

DRAWN BY:	ESS
DESIGNED BY:	ESS
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	OCTOBER 7, 2021
SCALE:	AS NOTED
PROJECT NO.:	221-187
DWG. TITLE:	

**CONSTRUCTION
DETAILS**

DWG. NO:

D-4

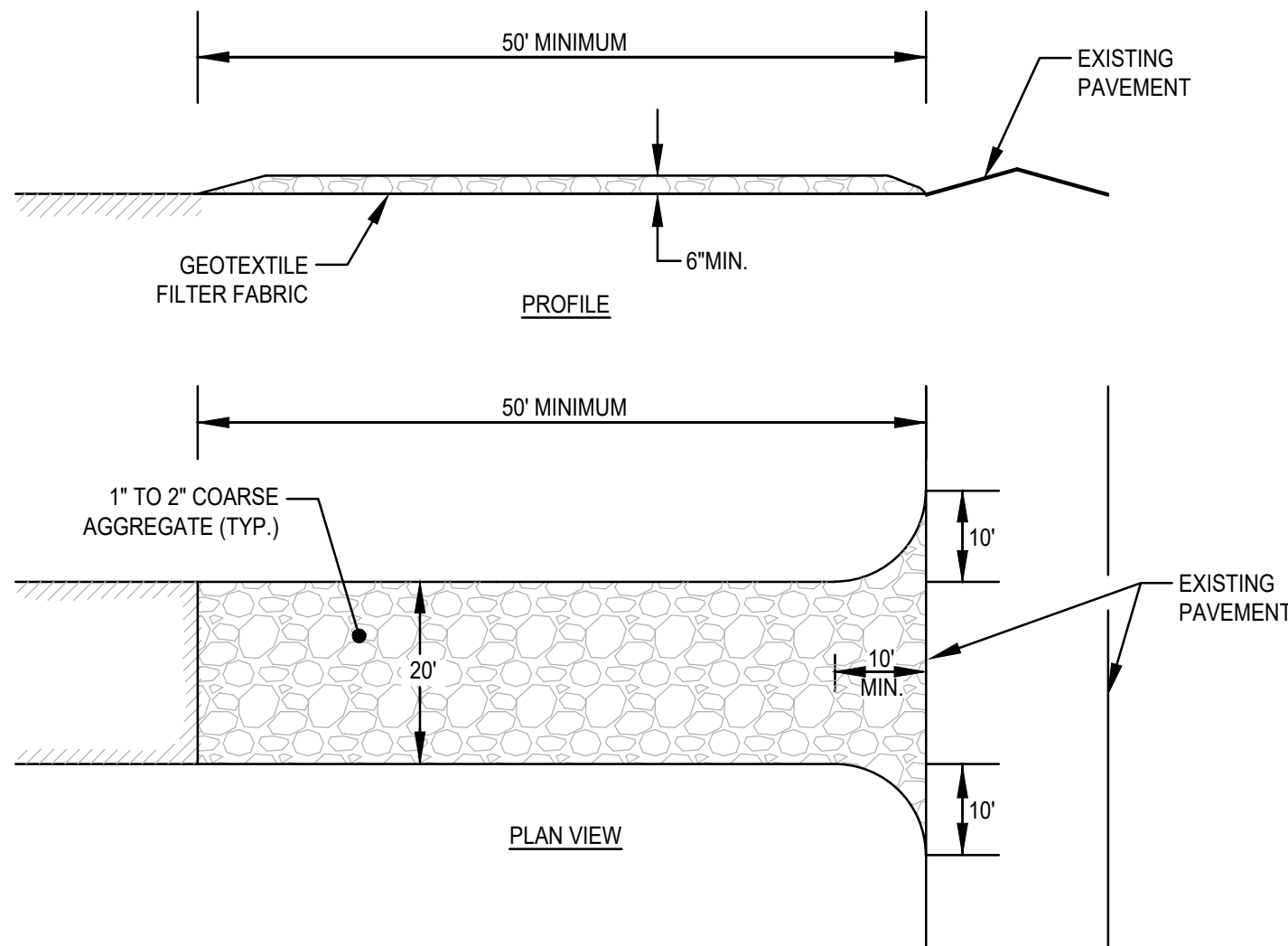
TO PREVENT EXCESSIVE EROSION AND SILTING, THE FOLLOWING CONSTRUCTION SEQUENCE COUPLED WITH OTHER WIDELY ACCEPTED PRINCIPALS FOR REDUCING EROSION AND SEDIMENTATION SHALL BE IMPLEMENTED IN THE DEVELOPMENT OF THE SITE.

1. THE CONTRACTOR SHALL COORDINATE A PRE-CONSTRUCTION MEETING PRIOR TO ANY CONSTRUCTION ACTIVITY.
2. THE STABILIZATION PROCEDURE FOR EROSION AND SEDIMENT CONTROL SHALL BE INSTALLED PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. REFER TO "EROSION AND SEDIMENTATION CONTROL" SECTION OF THIS PLAN & PLACE SILTATION FENCE ON THE SITE PLANS.
3. CLEAR AND GRUB UP AS REQUIRED FOR THE CONSTRUCTION OF THE ROADWAY, PARKING AREAS AND RELATED INFRASTRUCTURE.
4. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE
5. CONSTRUCT SLOPES, SLOPE PROTECTION, SUBSURFACE DRAINAGE, CUT AND FILL AREAS AND STOCKPILE ON SITE IN LOCATIONS SHOWN ON THE PLAN. CONSIDERATION SHOULD BE GIVEN TO LOCATING STOCKPILES ON THE UPHILL SIDE OF DISTURBED AREAS, WHERE POSSIBLE, TO ACT AS A BARRIER TO DIVERSION.
6. CONSTRUCT CUT AND FILL AREAS, INSTALLING HAYBALE CHECK DAMS AT TOES OF ALL 3:1 OR GREATER SLOPES, AND AT ENDS OF ALL CUT AREAS. ALL FILL WILL BE INSTALLED USING 12" GRAVEL OR COMPACTED LIFTS. PLACE ALL SLOPE PROTECTION WHERE INDICATED ON THE PLAN. THE SUBSURFACE DRAINAGE SYSTEMS SHALL BE CONSTRUCTED IMMEDIATELY AFTER THE ROADWAY ROUGH GRADING IS COMPLETED AND THE AREA HAS BEEN CLEARED OF VEGETATION.
7. INSTALL CLOSED DRAINAGE SYSTEM AND OTHER UTILITIES. ALL CATCH BASINS SHALL BE COVERED WITH SILTSACK OR EQUIVALENT INLET PROTECTION.
8. GRADE ROADWAY TO SUBGRADE ELEVATION AND CONSTRUCT SIDE SLOPES. APPLY EROSION AND SEDIMENTATION CONTROL MEASURES AS WARRANTED. REFER TO "EROSION AND SEDIMENTATION CONTROL" SECTION OF THIS PLAN.
9. PLACE GRAVEL SUBBASE.
10. PLACE THE FINAL 12" OF CONCRETE BINDER COURSE ON ROADWAY AND PARKING AREAS.
11. GRADE SLOPES AND STABILIZE CUT AREAS AT TOE OF SLOPES. BLEND ALL SLOPES INTO EXISTING TOPOGRAPHY AND LOAM AND SEED ALL DISTURBED AREAS. SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH JUTE MESH.
12. PLACE THE FINAL WEARING COURSE AND PAVEMENT.
13. COMPLETE FINAL GRADING OF SHOULDER AND PLACE PAVEMENT IN MISCELLANEOUS AREAS.
14. REMOVE TEMPORARY EROSION CONTROL DEVICES ONCE ADEQUATE GROWTH IS DEVELOPED. ADEQUATE GROWTH IS DEFINED AS VEGETATION COVERING 75% OR MORE OF THE GROUND SURFACE.

STRUCTURAL PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE SILT SOCK BARRIER CONTROLS, STABILIZED CONSTRUCTION ENTRANCE, TEMPORARY DIVERSION SWALES WITH STONE CHECK DAMS, SEDIMENT BASINS, AND INLET PROTECTION.

STABILIZATION PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE TEMPORARY SEEDING, GEOTEXTILES (JUTE MESH), MULCHING, AND PERMANENT SEEDING.

IN GENERAL, THE SMALLEST POSSIBLE AREA OF LAND SHOULD BE EXPOSED AT ONE TIME. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHALL BE CONFINED TO A MAXIMUM PERIOD OF 90 DAYS AND SHALL BE PROTECTED BY MULCHING, SEEDING, AND TEMPORARY TURFED AREAS WHICH ARE TO BE LEFT TEMPORARILY AND THAT WILL BE REGRASSED AT A LATER DATE SHALL BE MACHINE HAY MULCHED AND SEEDDED WITH WINTER RYE TO PREVENT EROSION.

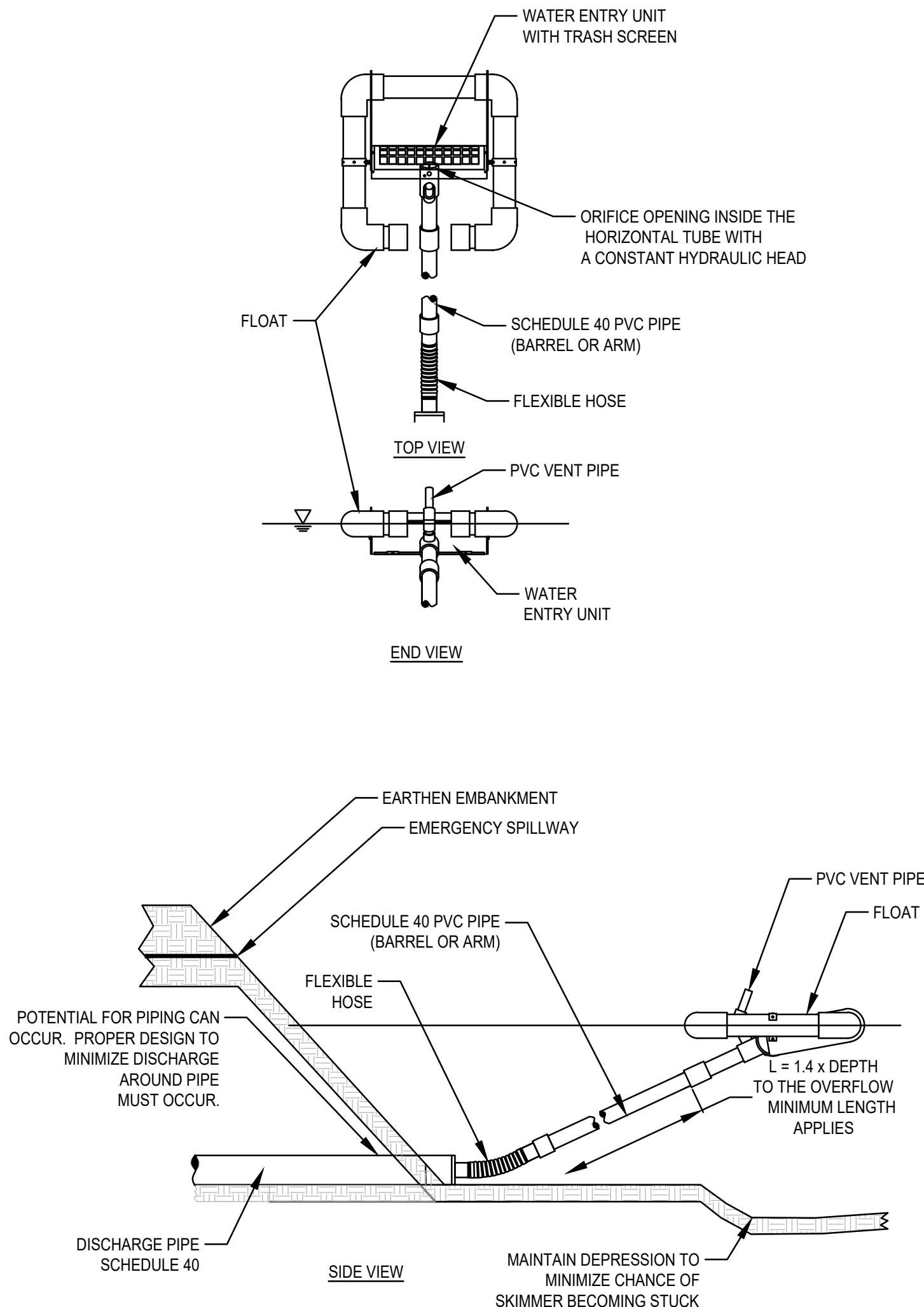


(SCE) CONSTRUCTION SPECIFICATIONS

1. STONE FOR A STABILIZATION CONSTRUCTION ENTRANCE SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE.
2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT A 30 FOOT MINIMUM LENGTH WOULD APPLY.
3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN A FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICH EVER IS GREATER.
5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO LAYING THE STONE.
6. ALL SURFACE WATER THAT IS FLOWING TO OR DEVERTED TOWARDS THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED PROMPTLY.

STABILIZED CONSTRUCTION ENTRANCE (SCE) DETAIL
SCALE: N.T.S.

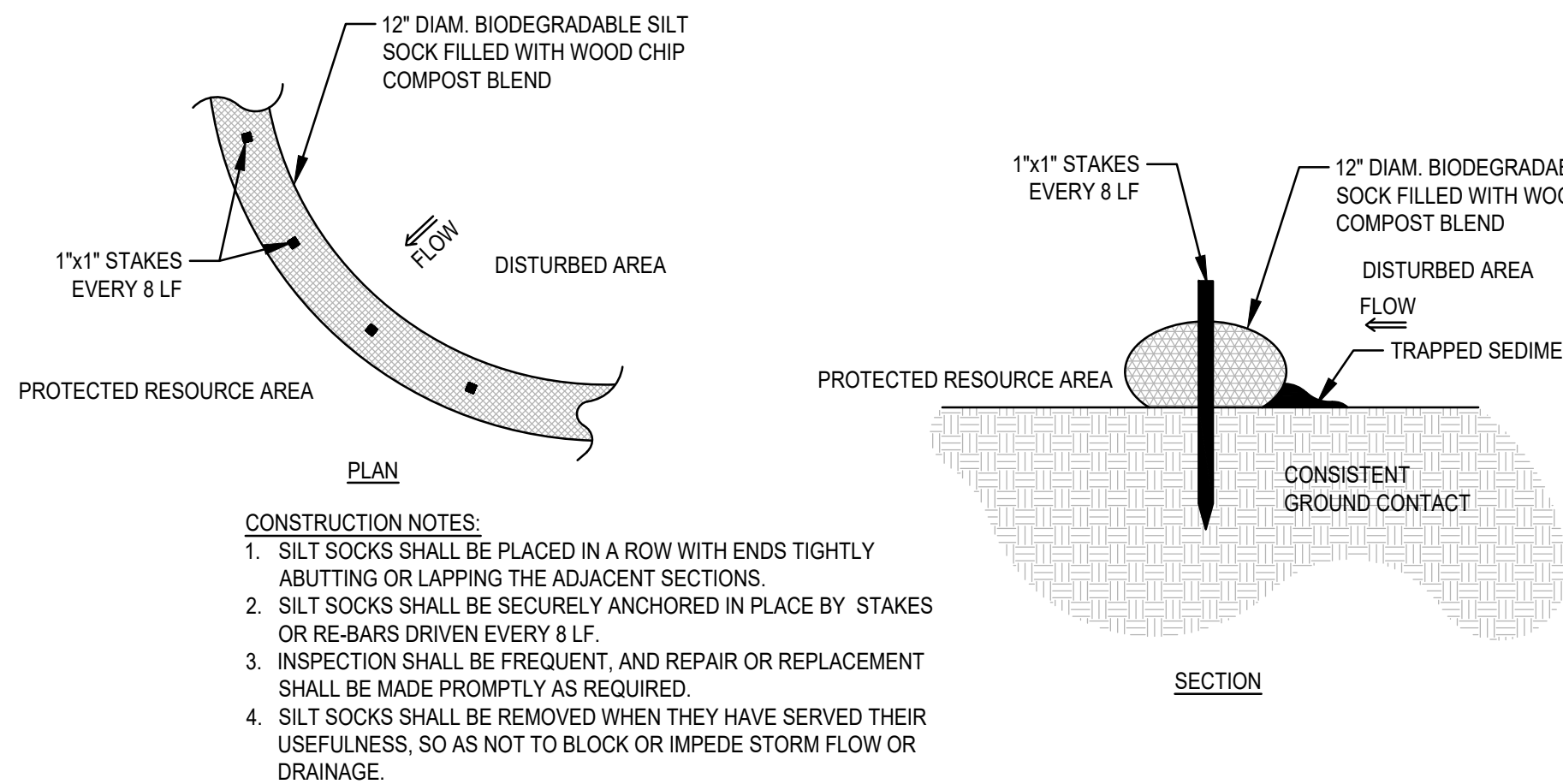
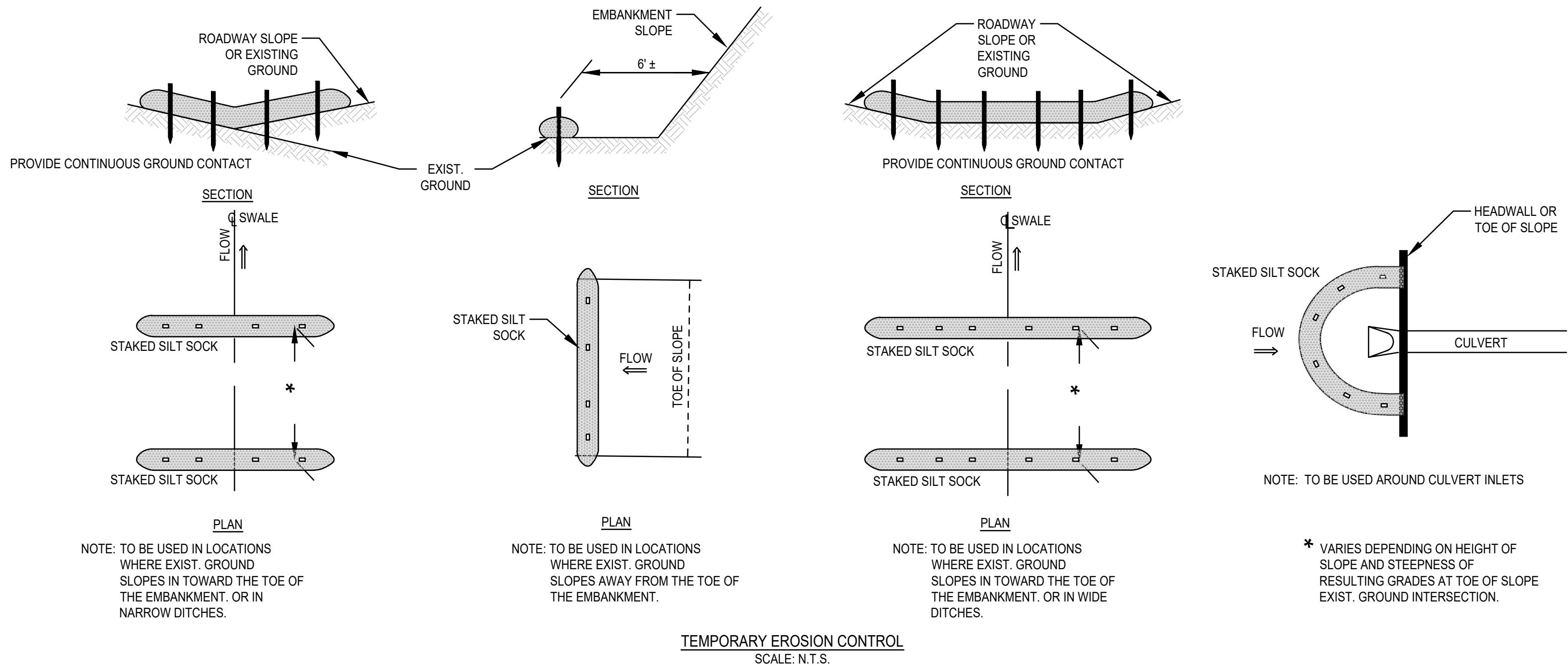
1. STRUCTURAL PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE EROSION CONTROL, BARRIERS, STABILIZED CONSTRUCTION ENTRANCES, TEMPORARY SWALES, SWALE PLANTINGS, SEDIMENT BARRIERS, AND INLET PROTECTION.
2. STABILIZATION PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE TEMPORARY SEEDING, GEOTEXTILES (JUTE MESH), MULCHING, AND PERMANENT SEEDING. OPERATOR PERSONNEL MUST INSPECT THE CONSTRUCTION SITE AT LEAST ONCE EACH WEEK FOR EVIDENCE OF EROSION OR SEDIMENTATION. IF EVIDENCE IS MORE OR GREATER, THE INSPECTOR SHOULD REVIEW THE EROSION AND SEDIMENT CONTROLS WITH RESPECT TO THE FOLLOWING:
 - A. WHETHER OR NOT THE MEASURE WAS INSTALLED/PERFORMED CORRECTLY. WHETHER OR NOT THERE HAS BEEN DAMAGE TO THE MEASURE SINCE IT WAS INSTALLED OR PERFORMED.
 - C. WHAT SHOULD BE DONE TO CORRECT ANY PROBLEMS WITH THE MEASURE.
3. IF EVIDENCE OF EROSION OR SEDIMENTATION IS OBSERVED, THE INSPECTOR SHOULD CHECKLIST FOR FINDINGS AND SHOULD REQUEST THE REQUIRED MAINTENANCE OR REPAIR. THE CHECKLIST IS PROVIDED WITHIN THE OPERATION AND MAINTENANCE PLAN.
4. OPERATOR PERSONNEL SHALL BE INSPECTED AND CLEARED IF REQUIRED PRIOR TO ANY PREDICTED LARGE STORM EVENT.



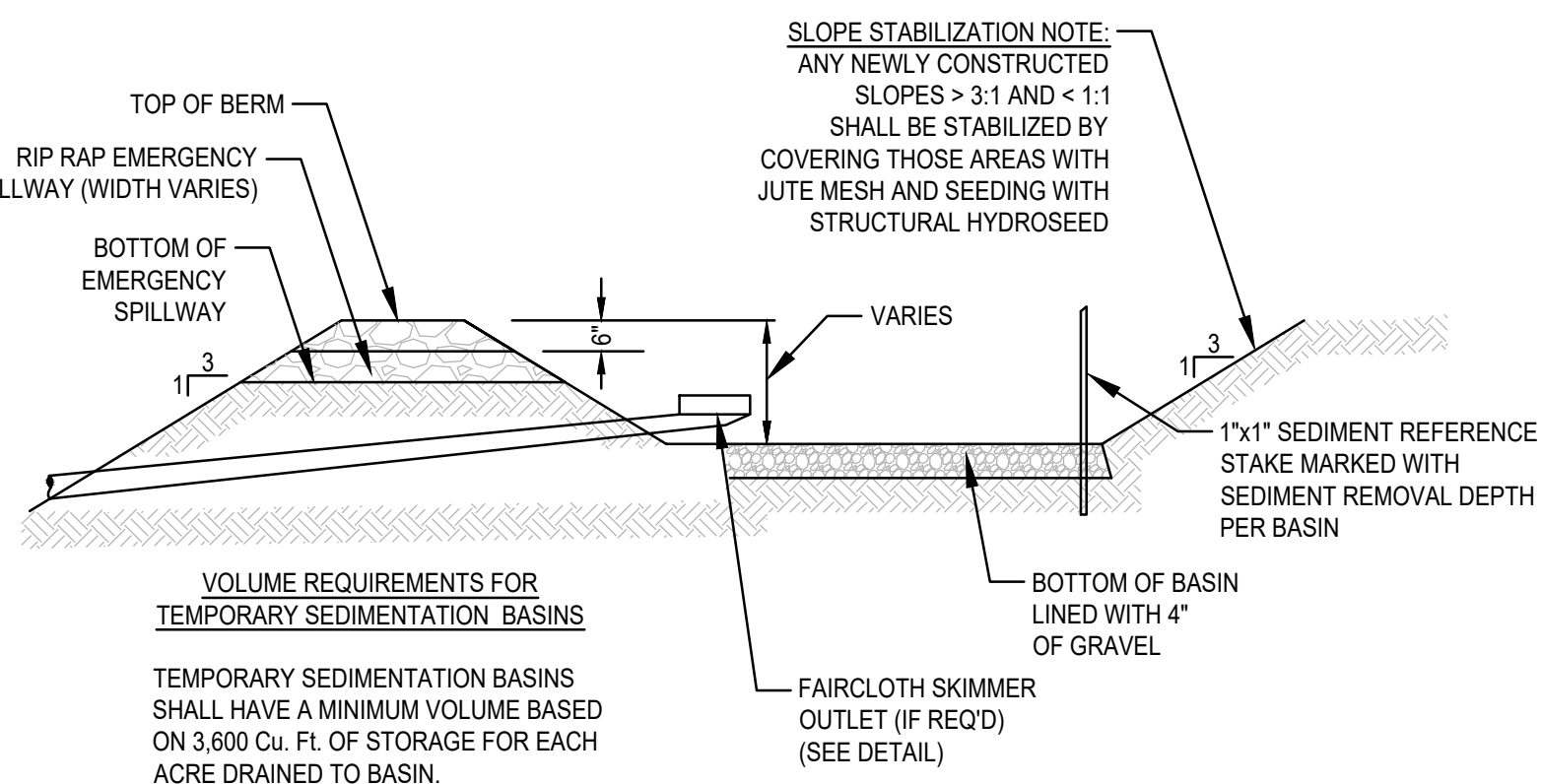
GENERAL NOTES:

1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING ALONG DISCHARGE PIPE
2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
6. ENTIRE SYSTEM REQUIRED TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
7. EIGHT SIZES OF SKIMMERS ARE AVAILABLE. REFER TO THE FLOW SHEET, CUT SHEET, AND INSTRUCTIONS ON WEB SITE FOR EACH SIZE.

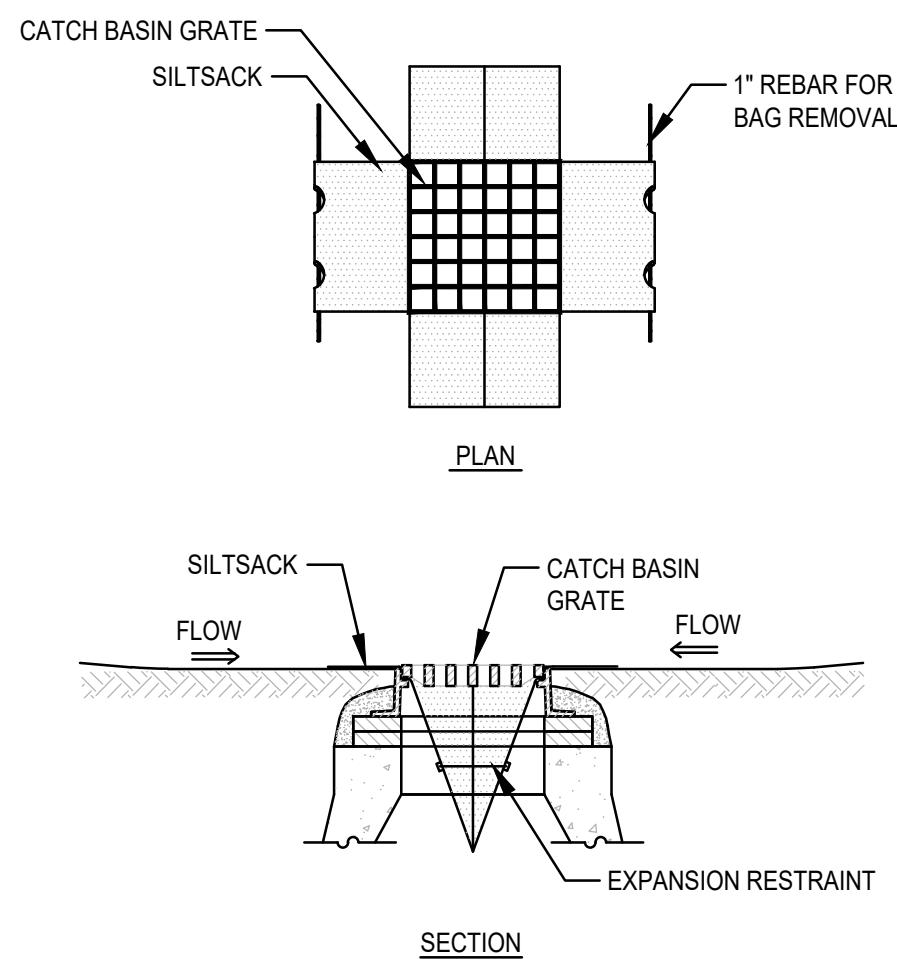
FAIRCLOTH SKIMMER DISCHARGE SYSTEM W/EMBANKMENT
SCALE: N.T.S.



SILT SOCK EROSION CONTROL BARRIER DETAIL
SCALE: N.T.S.



TEMPORARY SEDIMENTATION BASIN
SCALE: N.T.S.



SILTSACK SEDIMENT TRAP
SCALE: N.T.S.

[illegible]

SITE DEVELOPMENT PLANS
(ASSESSOR'S MAP 57, PARCEL 70)
320 CONCORD STREET
ROCKLAND, MASSACHUSETTS

PROFESSIONAL ENGINEER



OWNERS/APPLICANT:

WALL STREET DEVELOPMENT
CORP.
2 WARTHIN CIRCLE
NORWOOD, MASSACHUSETTS 02062

PERMIT PLAN SET

DRAWN BY:	ESS
DESIGNED BY:	ESS
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	OCTOBER 7, 2021
SCALE:	AS NOTED
PROJECT NO.:	221-187
DWG. TITLE:	

CONSTRUCTION DETAILS

DWG. NO:

D-5

